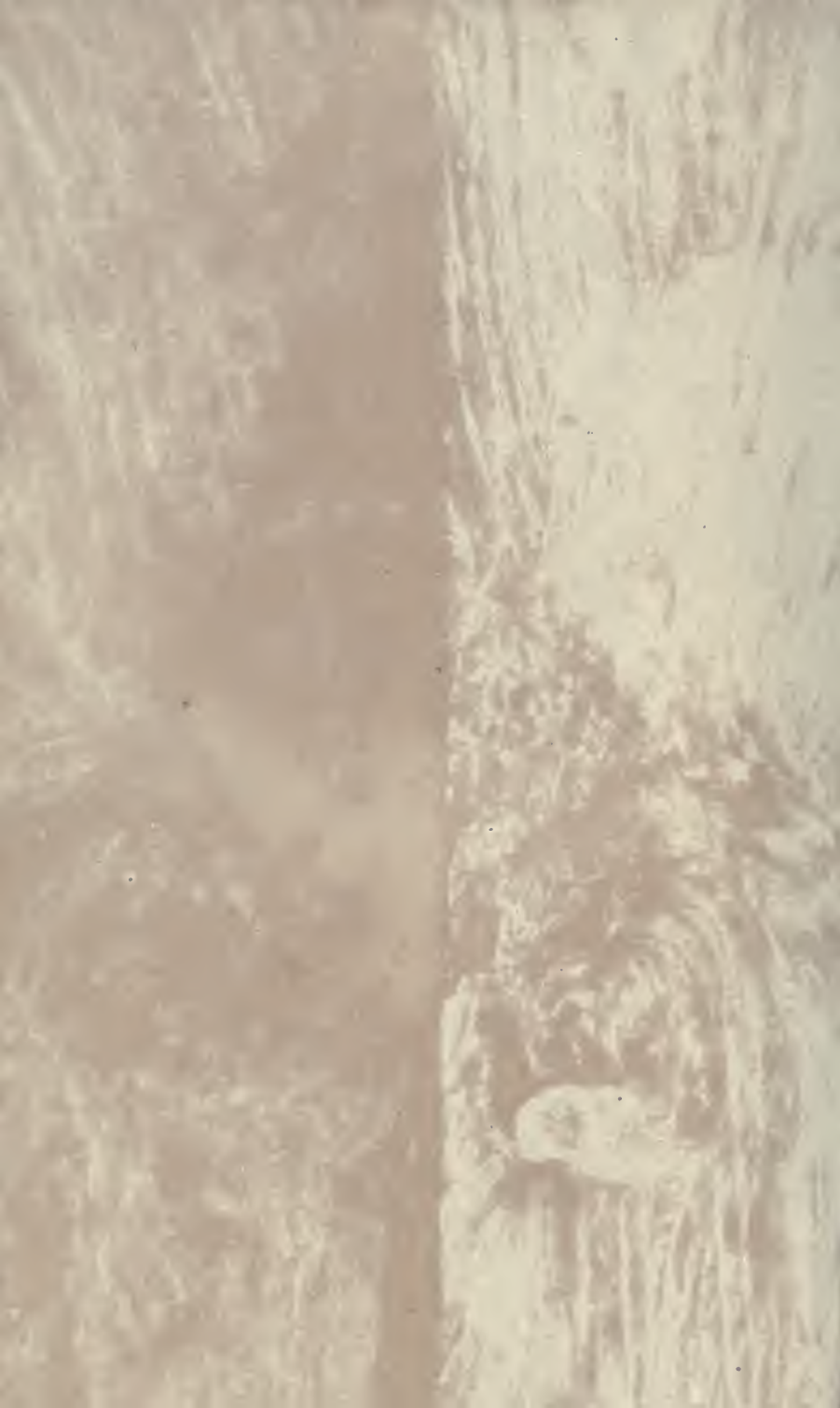


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AND
MENTAL PATHOLOGY.

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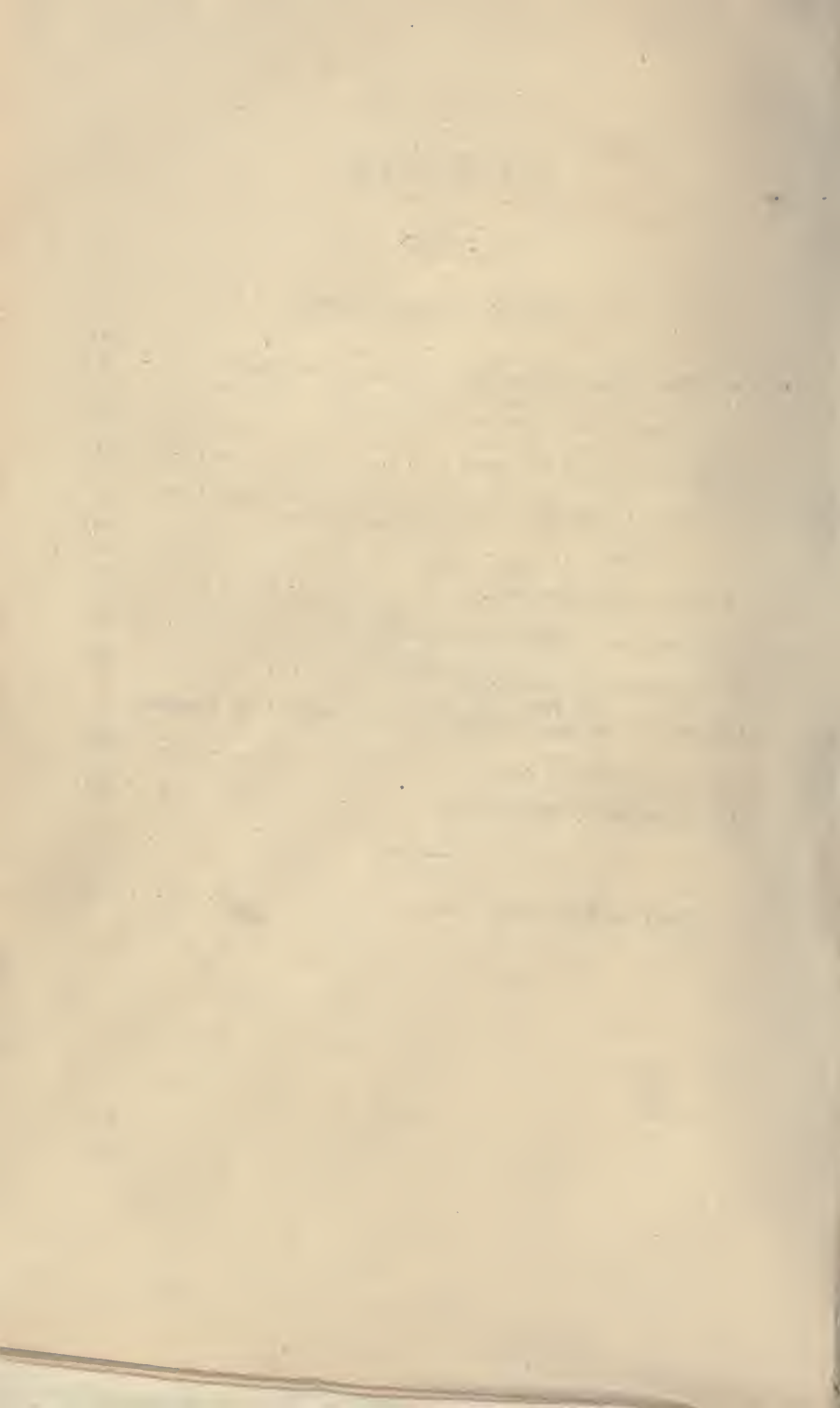
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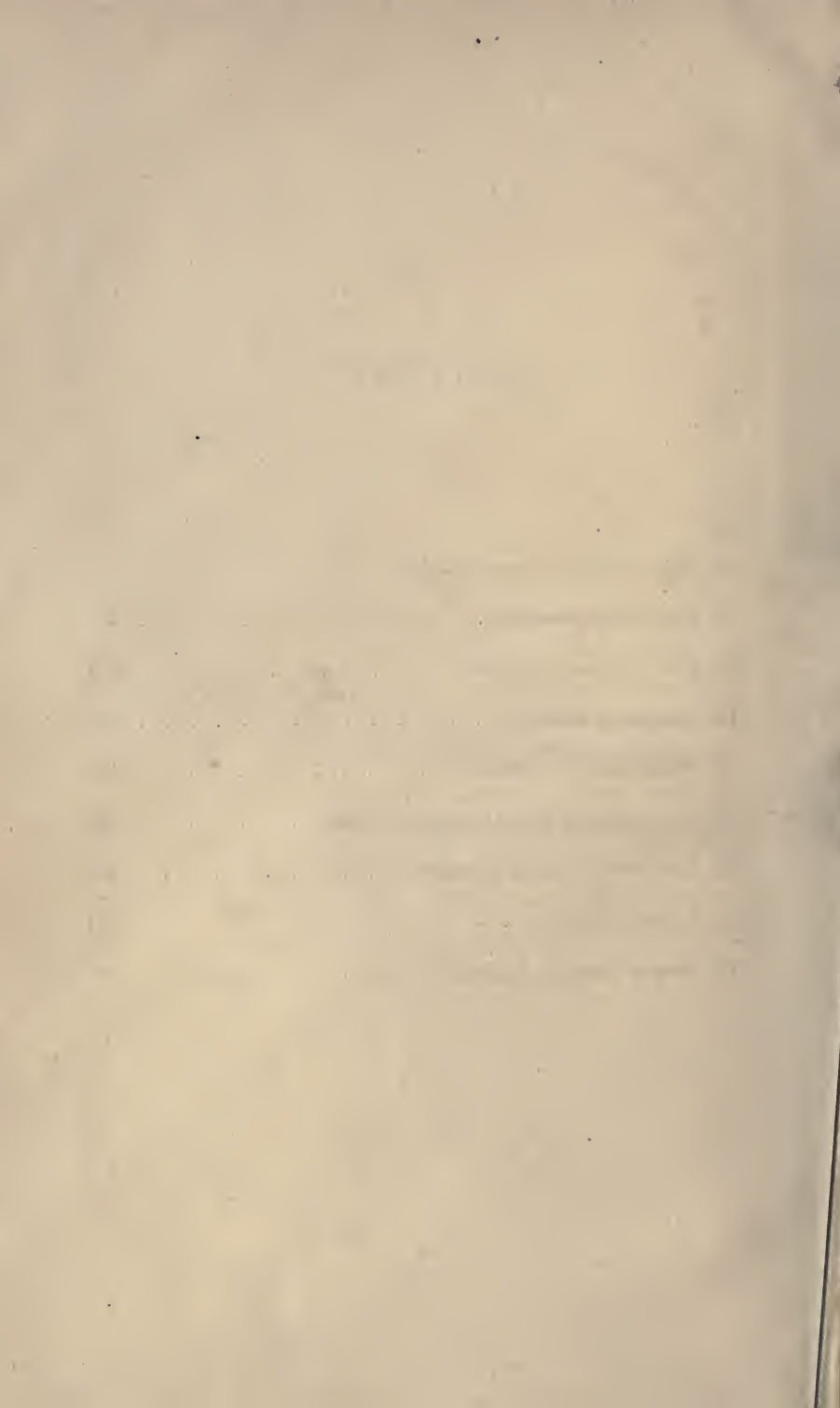
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THE JOURNAL
OF
PSYCHOLOGICAL MEDICINE
AND
MENTAL PATHOLOGY.

JANUARY 1, 1857.

Part First.

Original Communications.

ART. I.—PROLONGED SHOWER-BATHS IN THE TREATMENT OF THE INSANE.*

BY THE EDITOR.

OUR readers will remember that the Commissioners in Lunacy instituted a prosecution against Mr. Charles Snape for having, as they alleged, caused the death, on the 9th of April, 1856, of a pauper patient of the name of Daniel Dolley, confined under that gentleman's care, in the male department of the Surrey County Lunatic Asylum, by subjecting him to a continuous shower-bath of *thirty* minutes' duration, and for having administered to the said Daniel Dolléy, soon after his removal from the bath, and whilst in a state of vital depression, a dose of "white coloured mixture," alleged to have contained two grains of tartar-emetic. In the last number of this Journal we intimated that the grand-jury had thrown out the bill of indictment.

Pending the trial, the Committee of the Surrey County Asylum very properly suspended Mr. Snape, appointing Dr. French, *ad interim*, to superintend the male side of this institution. It will gratify the friends of Mr. Snape to hear that he has been reinstated into office. Six medical gentlemen of position, character, and reputation were selected to decide the question of re-nomination. Three were appointed by the Committee

* A Letter to the Committee of Visitors of the Surrey Lunatic Asylum, by Charles Snape, Medical Superintendent (male department), in reference to the Case of Daniel Dolley (deceased).—London: John Churchill.

of the Asylum, and three were named by Mr. Snape himself. We believe these gentlemen were unanimous in recommending that Mr. Snape should be restored to his former official position. Such being the verdict of the professional jury delegated with authority to settle the question of re-appointment, we are in a measure precluded from discussing the important points involved in the bill of indictment against Mr. Snape.

It would be obviously unfair to this gentleman to re-open the question. He should have the full benefit of his entire acquittal at the hands of two tribunals, who adjudicated upon his case. Here the matter should and ought to have rested, if Mr. Snape had been well advised. Considering himself much aggrieved, his character to have been seriously reflected upon, his skill and humanity to be gravely questioned, Mr. Snape might with propriety have defended himself against the specific offence imputed to him, *viz.*, that of causing the death of Daniel Dolley by wilful negligence, unskilful and unscientific treatment. No one would or could have blamed him for so reasonable and natural an act of self-justification; but the question assumes altogether another and a serious aspect, when a formal and studied argument is put forward in defence, not of his treatment of this particular case, but of prolonged shower-baths, as a safe, efficient, judicious, and curative process of treatment.*

Such being the position taken by Mr. Snape, in the pamphlet which he has published, we have no alternative but to pause and

* Our non-professional readers should remember that we are not now speaking of an ordinary harmless *domestic* shower-bath, but one of formidable dimensions. The following extract from the report made for the Commissioners in Lunacy by Mr. C. Vignoles, civil engineer, will convey some idea of the size of the bath used in the Surrey County Lunatic Asylum, and which Mr. Snape alleges he has been using for four or five years:—"On the supposition that the supply was equal to the discharge (during the time the lunatic remained in the shower-bath) after the water had fallen to the minimum head of four inches, the following must have been the quantity of water discharged upon him during the above twenty-eight minutes, *viz.* :—

In the first half-minute . . .	19½ gallons, or 39 gallons per minute.
In the next minute and a-half 39 . . .	ditto or 26 . . . ditto
In the last 26 minutes . . .	507 ditto or 19½ . . . ditto

—
567 gallons in 28 minutes,

being an average discharge equal to the contents of a *twenty-gallon-cask of water per minute* for nearly half an hour upon the lunatic." Mr. Snape, questioning the accuracy of the above calculations, appointed his own engineer to examine the capacity of the bath, and, in justice to the accused party, we append his view of the matter in dispute:—

"The total contents of the cistern when full are *not* 400 gallons, as stated by Dr. Diamond, but 91 gallons; and the total quantity discharged during twenty-eight minutes, by actual test for that period, and not by estimate—was not 618 gallons, as stated by Mr. Shields, but 477 gallons; of which *not more than* 119 gallons could have passed over the body of Dolley *during the twenty-eight minutes*, the remainder not touching him; while even of the 119 gallons, it is evident that the larger portion must have been wholly turned off from his body by his two hands, which he placed over his head."

consider these questions,—Is Mr. Snape right in his view of the treatment of the insane, and has he, as he appears to believe, discovered a new and valuable agent for the cure of Insanity? This subject cannot be ignored. It comes formally and legitimately before us; Mr. Snape has thrown down the glove, and challenged the profession to the combat, and we should be guilty of a serious dereliction of duty as public journalists, if we, out of any feelings of false delicacy, were not to enter the arena, and subject the point at issue to a close and rigid examination. If Mr. Snape is right, then he should have all the credit due for suggesting a novel and beneficial mode of treating one of the most distressing class of affections with which the medical man has to deal. If, on the other hand, we consider the use of the prolonged shower-baths, with or without large doses of tartrate of antimony, positively mischievous and unjustifiable, we should be criminal if we were to be silent on the subject. We repeat, that we are *forced* into this inquiry; Mr. Snape's published defence of his treatment makes it imperative. In considering the question before us we will, as far as practicable, leave the particular case of Daniel Dolley entirely out of discussion.

It would appear from Mr. Snape's statement that the prolonged shower-bath, as a remedial mode of treatment in cases of insanity, is no new-fangled or suddenly conceived notion, which has just sprung into mental existence, but that he has, on the inductive method, *for years* been carefully trying experiments with the baths, and has assured himself of their efficacy and safety. Such is the conclusion clearly deducible from the subjoined paragraph:—

"Why visit with the utmost denunciation of the law, and subject to the obloquy and ruinous consequences of a public prosecution as a felon, a medical man elected on account of his past experience and medical attainments to such a post, because he has the courage *to carry onward remedial measures which, for a period of four or five years, he has been gradually applying, and with unvarying success*; although to other institutions even the treatment so long practised by him may be unknown, and, therefore, may be too hastily and most erroneously regarded, *speaking from THEORY only*, as dangerous and bad?"

We think it would have been more discreet if Mr. Snape had omitted all reference to the treatment pursued in other Asylums, and had confined his observations to the defence of his own peculiar practice. When speaking of the uncertainty of medical treatment in all cases of disease as a justification, we presume for his own happy "guess," Mr. Snape remarks:—

"The science of medicine in all its branches will ever be a science of unusual difficulty and doubt, from the necessity of treatment being based upon 'surmise;' and, after all, he is the ablest practitioner who

guesses most correctly, and assumes most justly the real seat and nature of the disease to be grappled with. But it is still 'surmise;' and if in the treatment of bodily ailments there be so much doubt, how much greater is the doubt in reference to mental disease?"

We enter our protest against this singularly inaccurate and unhappy statement. Mr. Snape is not justified in representing the science of medicine to be "based upon *surmise*," or in asserting that he is "the ablest practitioner who GUESSES most correctly, and ASSUMES most justly, the real seat and nature of the disorder to be grappled with." The science of medicine is not open to so serious and fatal an imputation. If Mr. Snape had contented himself with repeating the old hacknied assertion, that medicine was an *uncertain* science, we should not have objected to the dogma. And why is the science of medicine an "uncertain" one? Not because the medical practitioner has to "guess," "assume," and "surmise," as Mr. Snape represents, but because he has to deal with an organic *living* machine—with a body endowed with *mind*, and with *life*—subtle principles, of the nature of which we know little or nothing—principles of *vitality* and *intelligence* always in operation, modifying the character of healthy and morbid action, and powerfully influencing the *modus operandi* of remedial agents exhibited for the cure of disease.

It is a libel upon the medical profession to say that the treatment of disease is "based upon SURMISE" and "GUESSES," or that "he is the ablest practitioner, who GUESSES most correctly." This is the language of the empiric, not the man of science. If a patient were brought to the Surrey County Lunatic Asylum, suffering from *delirium-tremens*, would not Mr. Snape's experienced eye immediately recognise the malady? There would be no "guessing" in the matter; he would, without hesitation, designate the disease by its right name. Again, when called upon to grapple with the case remedially, his treatment would not be based upon "*surmise*," neither would he "guess" at his therapeutic agents. Instinctively he would seize upon the appropriate specific. In the treatment of the ordinary diseases which come under the notice of the physician in every-day practice, such as gout, pneumonia, enteritis, gastritis, as well as in the numerous class of cutaneous affections, where is the "guessing," the "assuming," and the "surmising"? Surely there are intelligent and well-educated men in the profession, who can diagnose with extraordinary accuracy the pathological character and seat of the principal morbid changes that may have taken place in the various vital and organic tissues? Consider, for example, the organ of respiration. In the affections of this organ, is not the experienced physician fully competent to pronounce authoritatively upon the case, as one either of congestion, inflammation,

or hepatization? Is not the existence of pulmonary tubercles easily detected? Is it not possible to say with certainty whether a cavity does or does not exist in the lungs? This is not "guessing" or "surmising." So wonderful is our existing knowledge of the characteristics and pathology of disease, that it is rare for a well-educated and experienced practitioner to commit an error, either in his diagnosis or treatment. He does not, unhappily, always succeed in curing his patient, but this does not arise from a wrong "guess," or an unlucky "surmise," or unfortunate "assumption," as Mr. Snape would lead the public to believe. The profession of medicine would indeed be reduced to a very low ebb, and the practitioner of this exalted art would be in a humiliating position, if the noble science which he cultivates and practises were based upon "*guesses*," "*assumptions*," and "*surmises*." There is much in pathological science still *sub-judice*; and there are a few diseases which continue to baffle the physician, and set at defiance the best directed of his most powerful remedial agents. This, necessarily, must always be the case; but this generally acknowledged fact does not justify the sweeping and indiscriminate charge brought by Mr. Snape against the science of medicine. God forbid that the physician who, in the language of Mr. Snape, "guesses most correctly, and assumes most justly," should ever be considered as "the ablest practitioner."

But to proceed. Mr. Snape quotes approvingly from a recent work of Dr. Conolly, who, when speaking of the "obscurity" of our "pathology of mental disorders," observes, "there is still no reason to abandon the hope that fresh resources will some day be possessed by the practitioner, and that the real nature of the changes taking place in the brain may be better understood, and greater success attend medical treatment." We cordially re-echo the wish expressed by Dr. Conolly; but in what way do these remarks bear upon Mr. Snape's defence of prolonged shower-baths? He alleges that he ought not to be "denounced as a barbarous practitioner for advocating a course of treatment which he has practically proved to be so good and valuable in itself (speaking of twenty minutes' continuous shower-baths), because others who have *not tried* this treatment *consider* it as dangerous and unsafe." Certainly not. It would be monstrous to condemn a man on such grounds. But he must first clearly establish that he has discovered a course of treatment not only "good and valuable in itself," but safe and judicious. If Mr. Snape considers that the "prolonged shower-baths" are the "fresh resources" in the way of treatment, which Dr. Conolly hopes may at no distant period dawn upon the psychological horizon, then we are bound honestly to ask our-

selves these questions, are they *remedial* in their effects upon the insane; and are they *safe* modes of treatment? Mr. Snape alleges, that he speaks not only of the efficacy, but of the safety of these baths, basing his observation and conclusion upon "four or five years' most valuable experience." He says:—

"I have been in the frequent habit of administering continuous cold shower-baths to insane patients for periods of fifteen and twenty minutes, with and without intermissions of a few seconds, with the greatest success. I NEVER KNEW THE SLIGHTEST ILL RESULT, and instances can be given of *entire restoration to reason by one single fifteen or twenty minutes' continuous bath*: added to which, there are cases, which I should have proved had my case gone to trial, in which discharged patients have imputed their restoration solely to these long baths."

This is strong evidence in favour of Mr. Snape's treatment, and it is entitled to our respectful consideration. Such being the result of his "*four or five years' valuable experience*," we think he should have placed upon record, in the pamphlet under consideration, a more satisfactory and scientific classification of the cases in which he has used, with advantage and safety, the prolonged shower-bath, and have, at the same time, clearly expounded to his professional brethren a sound *principle* of treatment, as well as described the forms of insanity for the cure of which this remedy is adapted. Without *data* of this kind no general assertion of the curative efficacy of any particular course of treatment can meet with the deference and attention of scientific men. Are the prolonged shower-baths safe and useful in the treatment of acute mania, monomania, melancholia (acute and chronic), dementia, general paralysis? Upon these important points Mr. Snape throws no light:

"He dies and makes no sign."

He uses the general phrase, "Insanity," forgetting that this term conveys but a vague and unsatisfactory idea to the mind of the pathologist when called upon to estimate the value of any special course of medical treatment. A patient is brought to the Asylum in an acute state of mania, verging upon cerebritis, exhibiting all the well-recognised symptoms of sanguineous congestion of the brain. The patient is wildly delirious—the scalp hot—the skin dry and parched—the conjunctivæ injected—the pulse rapid: in common parlance, he is insane. Is this, we ask Mr. Snape, a case for the prolonged shower-bath of fifteen, twenty, or thirty minutes' duration? Again, a man enters the hospital so physically reduced as to be unable to creep into the wards. He has the physiognomy of an imbecile; he cannot articulate; he falters and staggers in his gait; his general bodily condition is that of extreme prostration. Associated with these

symptoms, his mind is in a morbid state of exaltation. He asserts that he is the possessor of a fabulous amount of wealth, and maintains that he is a king, an emperor, or our Saviour: in other words, he is suffering from the general paralysis of the insane. Is this a type of case in which Mr. Snape would advise the use of the prolonged shower-bath? Without something more specific from the pen of this gentleman, his general, wholesale, and indiscriminate recommendation of this remedial agent in the treatment of insanity is worse than valueless. But Mr. Snape not only believes that he has succeeded in "guessing" at the "fresh resource" spoken of by Dr. Conolly as the therapeutic desideratum, but that the reason why it has been so ignored and condemned, is, that the professional mind is not yet sufficiently matured and ripe to receive the great truth which he has had the good fortune to discover, and the moral courage to propound. *Credat Judæus?* In other words, this wonderful and happy "guess" of prolonged shower-baths, is only second in importance to the discovery of railway travelling!

Mr. Snape remarks—

"When the late Mr. George Stephenson was asked by a Commons railway committee, in the year 1836, whether a railway train could travel at the rate of a mile a minute without danger, his sagacious reply was 'Yes; *but the public mind is not yet prepared to receive that truth as a fact.*' Such is precisely the present state of the 'shower-bath' question."

Fustian and bombast! Surely Mr. Snape is a wag, and has put this forward as a piece of pleasantry? After reading the paragraph,

"To be grave exceeds all power of face."

Mr. Snape would wish the public and profession to believe that he is another Galileo—a second Jenner: prosecuted, persecuted, hunted down, condemned, tabooed, and vilified, because he has had the good fortune to make a *discovery considerably in advance of the age!*

"Ye lesser stars, hide your diminished heads,"

and prostrate yourselves before this modern psychological luminary. When a man commits so egregious an act of folly as to go about the town upon a pair of stilts, with a ticket tied to the tail of his coat, on which is inscribed in large and legible characters the word *Martyr*, it is time that his ostentatious pretensions to so honourable a designation, and to so high a distinction, should be freely, fully, and unreservedly canvassed and criticized. Mr. Snape has only himself to blame if he does not come out of the field with a flourish of trumpets and flying colours.*

* One would imagine, from the way in which Mr. Snape writes, that he was entitled to all the credit of having been the first practitioner who advised the use of

Feeling himself to be in a difficulty as to the best mode of justifying his use of the prolonged shower-baths—appreciating the necessity of expounding some *principle* of treatment in connexion with them, Mr. Snape again shields himself behind the back of Dr. Conolly; but, conscious of the weakness of his case, he summons two other physicians to his support. He waves his magic wand, and *presto*, Drs. Elliotson and Davey appear upon the scene. And what do our readers conceive to have been the *principle* which has guided Mr. Snape in the treatment of the insane, and which, according to his mode of reasoning, justified the use of the prolonged shower-baths? Before proceeding further in this part of our inquiry, we would premise that in no science, so much as in medicine, is a reference to principles of so much consequence, for nowhere does the mere sequence of events, the *post hoc propter hoc* mode of argument, so often lead into error.

“Without principles,” says the great Dr. Cullen, “deduced from analytical reasoning, experience is a useless and a blind guide.” Appreciating this truth, Mr. Snape protects himself—in fact, hedges himself in—by enunciating to the scientific world the principle which has led him through the obscure and hazy paths of mental pathology to the great fountain, source and light of all sound therapeutic knowledge. “What,” says Mr. Snape, “is the purpose for which the shower-bath is recommended?” The object of the practitioner (quoting approvingly the words of Drs. Conolly,* Davey, and Elliotson), in the administration of the

the shower-bath in the treatment of the insane! As far back as the time of Boerhaave they were used in cases of insanity; and every modern writer on the subject speaks of their efficacy in certain forms of mental derangement. A physician is in the habit of prescribing six or ten grain doses of *quinine* in cases of intermittent fever. His neighbour ventures, under similar circumstances, to administer half-drachm doses of the same drug. If the dose were considered safe and judicious, and were in a few instances to succeed in stopping the progress of the fever, no person outside of St. Luke’s would think of placing this practitioner upon a pedestal, or consider him a Jenner, or a John Hunter; neither would his friends, when he passed to the tomb of all the Capulets, have the courage to apply to Parliament for a public grant to erect a statue to his memory! Admitting Mr. Snape to have had the good fortune to hit upon an efficient remedy, what is really his due? It is perfectly preposterous for him to talk of his having made any discovery at all; and still more ridiculous for him to assert that his discovery is in advance of the age!

* Dr. Conolly never recommended continuous shower-baths of any considerable duration. He speaks favourably of the effects of “*intermittent shower-baths*,” and says, “if employed in the *ordinary manner* (that is, we presume, for *three or four minutes*), its effects are rather exciting than depressing.” Mr. Snape would lead us to believe that intermittent baths are more *distressing* and dangerous than a *continuous* shower-bath! How can this be? A patient who is subjected to a shower-bath of ten or fifteen minutes’ length, with a clear intermission of two or three minutes after the expiration of every four or five minutes’ bath, must, of necessity, have a much less shock than he would be subjected to if the bath were continuous for a period of fifteen or twenty minutes. In the intermittent baths, the patient is permitted occasionally to rally his powers of life; this cannot occur to the man who has a continuous bath.

shower-bath, is the "*overpowering of the patient*," "*the prostration of the system*;" it is to be continued "*until decided prostration ensues*."

If such is the principle upon which Mr. Snape regulates his administration of the prolonged shower-bath, or, in fact, any other of his remedial agents, lamentable, indeed, must be the result to the unhappy patients subjected to the treatment. This may be considered strong language, but we cannot finesse, or use equivocal and ambiguous terms, when discussing a matter involving not only the reason but the lives of so many of our afflicted fellow-creatures. We do not hesitate to assert that the principle of treatment propounded by Mr. Snape is glaringly inconsistent with the modern and approved views of the pathology of insanity. The practice of "*overpowering*" an insane patient, of "*prostrating the system*," of pursuing any plan of treatment, "*until decided prostration ensues*," is indefensible and unjustifiable.

In insanity, the *vis vite* is often reduced to the lowest possible condition. In the great mass of acute cases of disordered mind which the physician is called upon to treat—particularly in our public Asylums—the nervous system is in a state of positive exhaustion and debility. The furor,—the violence,—the maniacal excitement; the muscular resistance, so often associated with insanity, are generally symptomatic of *profound nervous and vascular depression*. The excitement of the insane is an *excitement without power*, and he is truly the "*ablest physician*" who, recognising this important pathological fact, does his utmost to *conserve and husband the flagging and ebbing vitality of his patient*, until the mind recovers its healthy equilibrium.

Insanity does not result from *active* inflammation of the brain, and, if such were its origin, no physician would be justified in attempting to "*prostrate the system*" of those mentally disordered. In cases of profound cerebral excitement, the patient often recovers under the combined influence of a *tonic and stimulating* plan of treatment. We have known violent mental perturbation considerably mitigated, and often cured, by the administration of wine and stout combined with iron and quinine. To put a patient, because he is "*violent*," "*noisy*," "*excited*," and "*destructive*," into a shower-bath of fifteen or twenty minutes' duration, with a view of "*prostrating*" his energies, is a practice that cannot be too gravely and seriously censured.

The physician may, by this mode of treatment, make a violent, excited, and unmanageable patient quiet and docile for a time; *but it will be quietness and docility gained at the expense of his reason, and perhaps of his life*. We are not called upon to mince words, or delicately and nicely weigh the import of

phrases, when addressing ourselves to a point of such practical magnitude and importance. Facts—an overwhelming mass of evidence—conclusively, irresistibly, and incontrovertibly establish, beyond all doubt, *that the depressing, lowering, and overpowering plan of treating the insane is most disastrous in its results.* Why is the lancet never now used in cases of insanity? Why is the strictly antiphlogistic treatment so studiously ignored? Because all practical, sagacious, and experienced psychologists, having to do with the care of the insane, recognise in the morbid affections of the mind a condition of brain and nervous system which will not tolerate a “depressing,” “overpowering,” and “prostrating” mode of treatment. What would be the effect—the *certain* effect, if the practitioner, merely considering the conditions of violence, excitement, and mischief, in a case of *delirium-tremens*, were to subject the patient to a prolonged shower-bath? Consider, again, the consequences of a similar course of treatment in a case of puerperal insanity? In this class of cases we often witness extreme excitement and violence associated with profound vascular and nervous depression. How dangerous must then be a practice which overlooks entirely the *pathological* state of the patient! If the treatment of the insane is to consist in a rapid reduction of the physical and mental powers of the patient to the *minimum* standard; if it be all-important to make a noisy, excited, destructive lunatic tractable and quiet, so as to preclude the necessity for the use of mechanical restraint,* then continue the prolonged shower-baths, followed by large nauseating doses of tartar-emetic; but if it be the intention to carry out a *curative process of treatment*, we must, by every effort in our power, husband and conserve the vital energies until reason ascends her throne.

We have hitherto confined our observations to the effects of

* With something like a *presentiment* of the substitution of the shower-baths and *tartar-emetic* for mechanical restraint, we penned the following remarks in the October number of this Journal, for the year 1854:—“Have not the frequent administration of nauseating doses of the tartrate of antimony, the shower and cold bath, in several asylums, *taken the place of mechanical restraint, producing, as can be readily conceived by those conversant with the pathology of insanity, the most disastrous consequences?* The use of the milder forms of mechanical restraint in cases of acute and dangerous insanity can do little or no permanent injury; but the repeated and continuous exhibition of tartar-emetic, chloroform, and stupifying doses of opium, with the view of subduing the muscular violence of the insane, and thus reducing them to a manageable condition, and obviating the necessity for mechanical restraint, *may do serious and irremediable mischief*; and for this obvious reason, that the patient is compelled to take medicines which greatly depress the nervous system, at a time when everything should be done to sustain the *vis vite*, and give increased impetus to the nerve force. It does not require much sagacity to reduce, by these means, a violent lunatic to a state of comparative composure and quietude; but we would caution all engaged in the anxious and responsible duties of treating the insane, against the adoption of a course alike dangerous to life and perilous to reason.”

the prolonged shower-bath, as the distinguishing feature in Mr. Snape's practice. Let us now briefly direct the attention of our readers to its necessary adjunct. It appears that Mr. Snape administers to his patients, after coming out of the prolonged shower-bath, one and a half to two grains of tartar-emeti^c! In other words, he, in addition to the shower-bath, exhibits an *emeti^c* to the patient. The above dose may not always induce vomiting, but it must do so in many instances. A man in health could not easily take *one* grain of the tartrate of antimony without disgorging the contents of his stomach. The insane, we admit, may take larger doses of this nauseating medicine with impunity; but, nevertheless, such a dose would cause violent vomiting even among the insane. If the medicine has not this effect, it will certainly lower and depress the powers of life, and we presume it is administered with this object. Let our readers pause for one moment to consider a patient suffering from a *depressing and exhausting disease* (and insanity is essentially one of this type), exposed to the still more depressing influence of a *continuous* fall of a large volume of water upon the head for a period of fifteen, twenty, and thirty minutes. He emerges out of his bath (as he must do) with the powers of life reduced to the minimum point. Not satisfied with this amount of physical exhaustion, the poor, helpless patient has his *vis vitæ* still further lowered by administering to him a large dose of tartar-emeti^c!

What is the principle involved in this plan of treatment, and why is the tartrate of antimony administered *at all* in such a state of the system? We can well understand in the early stages of sub-acute insanity, analogous in its symptoms to phrenitis, why nauseating doses of this medicine should cautiously be given; but in our judgment it is inadmissible in chronic forms of insanity, particularly when exhibited immediately after the use of a depressing prolonged shower-bath. This practice is opposed to the experience of most men engaged in the treatment of the insane, and we shall be glad to hear of its being altogether abandoned in the Surrey County Lunatic Asylum. In defence of his mode of treatment, both by the prolonged shower-bath and the tartrate of antimony, Mr. Snape has appended to his pamphlet a series of tables, illustrating his peculiar mode of practice. In justice to that gentleman we transfer to our pages the whole of this tabular statement, without abridgment or alteration. In these tables Mr. Snape cites the particulars of *fourteen* cases of alleged "cure," extending over the "*four or five years*," during which he has been experimenting with the bath! Is this not a small ratio of cure? viz., not *ONE per cent. per annum* out of the *four hundred male patients* on his side of the establishment always under his treatment!

SELECTION FROM CASES

In which Shower Baths and Tartrate of Antimony have been administered to Patients under Mr. SNAPE'S Care, and Extracts from Medical Case Books in support of the Treatment and its Effects.

No.	Age of Patient on Entry.	Length of Bath administered, in Minutes.	When followed by Tartrate of Antimony, the Quantity.	Extracts from Case Book of Special Notes in reference to Treatment.	Result to Patient, 1856.
1	About 60	15 or 20	1½ and 2 grains	29th Sept., 1841. Admitted. 22nd Dec., 1854. Remains unchanged; suffers occasionally from attacks of maniacal excitement, during which he is disposed to be mischievous and violent to others. <i>Shower-bath and tartar emetic are the remedies which have been employed.</i>	In Asylum.
2	57	15 or 20	1½ and 2 grains	1st March, 1854. Admitted. 14th June, 1856. He is subject to occasional attacks of maniacal excitement, with a disposition to be violent to others. <i>Shower-baths and tartar emetic mixture have been found beneficial.</i>	In Asylum.
3	51	20		16th Dec., 1848. Re-admitted.	

No.	Age of Patient on Entry.	Length of Bath administered, in Minutes.	When followed by Tartrate of Antimony, the Quantity.	Extracts from Case Book of Special Notes in reference to Treatment.	Result to Patient, 1856.
4	61	15 or 20	1½ and 2 grains	<p>6th June, 1853. Occasional shower-baths have been given with good effect.</p> <p>17th March, 1849. Admitted. He continues to have paroxysms of maniacal excitement, with a disposition to violence. <i>An occasional shower-bath and tartar emetic mixture have been prescribed with advantage.</i></p> <p>20th Dec., 1855. He continues to have periodical attacks of excitement, during which he is disposed to be violent in his conduct. <i>Shower-baths, with the mix. ant. tart., are sometimes found beneficial.</i></p>	
5	40	15 or 20	1½ every 3 hours	<p>4th Dec., 1851. Admitted.</p> <p>5th " Mix. tar. ant. 3 table-spoonfuls every 3 hours.</p> <p>7th " Broke windows; excited; shower-bath; continue ant. potass. tart.</p>	
6	26	20	2 grains	<p>2nd Feb., 1852. Admitted.</p>	Cured.

No.	Age of Patient on Entry.	Length of Bath administered, in Minutes.	When followed by Tartrate of Antimony, the Quantity.	Extracts from Case Book of Special Notes in reference to Treatment.	Result to Patient, 1856.
7	57	15 or 20	2 grains	4th Feb., 1852. Conducted himself in a violent and noisy manner; shower-bath and a large dose of tart. emetic; promised better behaviour for the future.	Cured.
				21st " " Made attacks upon those around him with a knife. A shower-bath and a grain and half of tart. emetic every six hours; gruel diet; to be kept under strict surveillance in No. 3 Day-room.	
				23rd Feb., 1855. Is perfectly rational in his conduct and conversation, and, at his urgent request, the medicine and shower-bath have been ordered to be discontinued.	
				28th Oct., 1853. Broke windows.	
				3rd April, 1852. Admitted.	
				7th " " Ant. tart.	
				9th " " Shower-bath.	
				12th " " To have shower-bath every morning.	

No.	Age of Patient on Entry.	Length of Bath administered, in Minutes.	When followed by Tartrate of Antimony, the Quantity.	Extracts from Case Book of Special Notes in reference to Treatment.	Result to Patient, 1856.
8	40	20	2 grains	9th Jan., 1854. Re-admitted.	Cured.
				20th Feb., " Abusive and destructive of his clothing, when an occasional shower-bath is given.	
				3rd May, 1852. Admitted.	
				5th May, " Shower-bath and tart. emetic.	
				7th " " Shower-bath. [<i>N.B. This patient imputed his recovery to the shower-bath.</i>] Admitted.	
9	58	15	1½ or 2 grains	20th July, 1852. He continues to labour under periodical attacks of maniacal excitement, at which times he is very noisy, abusive, threatening, and violent. A shower-bath and dose of	In Asylum.
				15th June, 1853. <i>niel. ant. tart. have been employed with advantage on two or three occasions.</i>	
				19th June, 1855. No alteration; baths occasionally.	
10	28	20	1 grain	30th July, 1852. Admitted.	Cured.
				31st " " Tart. Anty.	

No.	Age of Patient on Entry.	Length of Bath administered, in Minutes.	When followed by Tartrate of Antimony, the Quantity.	Extracts from Case Book of Special Notes in reference to Treatment.	Result to Patient, 1856.
11	58	Not known	Nil	<p>31st Oct., 1852. Threw down an attendant; shower-bath twice a day and seclusion; 1 grain of anty. 3 times a day.</p> <p>27th Nov., 1852. Admitted.</p> <p>5th April, 1853. <i>A shower-bath has been given on two or three occasions with apparent benefit.</i></p>	Cured.
12	41	20	2 grains	<p>29th Nov., 1852. Admitted.</p> <p>29th March, 1854. Has been labouring under maniacal excitement, with a disposition to be violent to others, for several weeks past. <i>The shower-bath, with an occasional dose of mix. tart. ant., together with purgatives, have been employed with the greatest advantage.</i></p> <p>26th Dec., " Excitement; the same remedies have been employed with marked benefit.</p> <p>Dec., 1855. He continues to have</p>	In the Asylum.

No.	Age of Patient on Entry.	Length of Bath administered, in Minutes.	When followed by Tartrate of Antimony, the Quantity.	Extracts from Case Book of Special Notes in reference to Treatment.	Result to Patient, 1856.
13	21	20	2 grains	occasional attacks of periodical excitement, which have been treated as heretofore. 16th July, 1853. Admitted. 29th Nov., " Bath and emetic. 10th June, 1854. He has had two or three paroxysms of maniacal excitement since last report (22nd Dec.), <i>for which shower-baths and a draught containing two grains of tartar emetic have been administered with most beneficial effect.</i>	In the Asylum.
14	64			6th Aug., 1853. Admitted. 23rd " " Shower-bath every morning.	Cured.
15	26	20	Not stated	7th Feb., 1854. Admitted. 14th March, " Shower-bath ordered to be given occasionally. 10th June, " Ditto 23rd March, 1854. Admitted. 25th May, " Shower-bath and emetic. 29th June, " Slightly excited and violent. Shower-bath twice a day, with emetic.	Cured.
16	37	20	4 grains		

No.	Age of Patient on Entry.	Length of Bath administered, in Minutes.	When followed by Tartrate of Antimony, the Quantity.	Extracts from Case Book of Special Notes in reference to Treatment.	Result to Patient, 1856.
17	34	20	1 $\frac{1}{2}$ and 2 grains	10th Aug., 1854. Repeat bath and mixture. Excitement. Shower-bath twice a day, and tartar emetic mixture, 2oz. (2 grains anty.) occasionally.	Still in Asylum.
				14th June, "	
				20th June, 1854. Has become quiet and tranquil. <i>The shower-bath, with the tartar emetic, are remedies which appear most efficacious in subduing cerebral excitement. He is now employed in his trade.</i>	
				15th July, 1855. Relapse. Shower-bath morning; warm bath night. Tartar emetic mixture (2 grains to a dose) occasionally.	
				29th " "	
				12th Dec., "	
				19th April, 1854. Admitted.	
				2nd Oct., "	
				5th Dec., "	
				Shower-bath every morning; warm bath every night. <i>Shower-bath and warm</i>	

No.	Age of Patient on Entry.	Length of Bath administered, in Minutes.	When followed by Tartrate of Antimony, the Quantity.	Extracts from Case Book of Special Notes in reference to Treatment.	Result to Patient, 1856.
				<i>bath, with tartar emetic, are prescribed with advantage.</i>	
				Occasionally labours under great maniacal excitement. Shower-bath; occasionally blistering liquid to the back of neck.	
				Highly excited. Tartar emetic 2 oz. occasionally, and shower-bath.	
				He continues to labour under a good deal of cerebral excitement, <i>which appears to be much subdued by a good strong shower-bath</i> and warm bath, and morphia at bedtime. Castor-oil occasionally.	
				Much more tranquil and composed.	
				Excited and violent; shower-bath & tart. ant.	
				Remedies continued.	
				Admitted.	
				25th Jan., 1855.	
				5th Jan., "	
				10th July, "	
				1st Aug., "	
				25th Sept., "	
				10th Oct., "	
				16th Jan., "	
18	41	2	2 grains		In the Asylum.

No.	Age of Patient on Entry.	Length of Bath administered, in Minutes.	When followed by Tartrate of Antimony, the Quantity.	Extracts from Case Book of Special Notes in reference to Treatment.	Result to Patient, 1856.
				29th March, 1855. Shower-bath and tart. ant. occasionally. 29th May, " Shower-bath every morning, and tart. ant. mix. 2 oz. (2 grs. a dose) occasionally; warm bath at night. 21st June, " Repeat. 16th " " Repeat shower-bath and tart. emetic. 25th " " Continue. 23rd Jan., 1854. Admitted. 24th " " Shower-bath occasionally. 26th " " Warm bath every night in addition. 10th Feb., 1855. Admitted. 4th Oct., " Excited; shower-bath and tart. emetic (2 grs.). 2nd Feb., 1856. Bath and mixture continued. 31st July, 1852. Admitted. 31st " " 1 gr. tart. ant. powder. 2nd Aug., " Repeat powder & shower-bath. 5th Oct., " Castor-oil and bath. 27th Jan., 1849. Admitted. 15th Sept., 1850. Is excited. Struck the	
19	19	15	Nil		Cured.
20	45	20	2 grains		In the Asylum.
21	46	20	1½ grains		Cured.
22	About 28	20	2 grains		

No.	Age of Patient on Entry.	Length of Bath administered, in Minutes.	When followed by Tartrate of Antimony, the Quantity.	Extracts from Case Book of Special Notes in reference to Treatment.	Result to Patient, 1856.
				<p>attendant this afternoon. Shower-bath every morning. Mix. ant. 2 oz. (2 gr. dose). Occasionally violent.— Sometimes has a shower-bath.</p> <p>June, 1851.</p> <p>Occasionally excited and violent. <i>Shower-baths, with the tartar emetic mixture, are the remedies employed.</i></p> <p>14th June, 1855.</p> <p>Admitted.</p> <p>Shower-bath every morning.</p> <p>7th July, " " " " " " " " " " " "</p> <p>31st " " " " " " " " " " " "</p> <p>30th " " " " " " " " " " " "</p> <p>1st Aug, " " " " " " " " " " " "</p> <p>8th " " " " " " " " " " " "</p> <p>24th Aug, " " " " " " " " " " " "</p> <p>8th Sept, " " " " " " " " " " " "</p> <p>22nd " " " " " " " " " " " "</p> <p>Shower-bath every morning, and morphia every night.</p>	<p>Cured.</p> <p>Dead.</p> <p>Cured.</p>
23	19	15 or 20			Cured.
24	37	15 or 20	Not stated.		Dead.
25	33	20	Ditto		Cured.

No.	Age of Patient on Entry.	Length of Bath administered, in Minutes.	When followed by Tartrate of Antimony, the Quantity.	• Extracts from Case Book of Special Notes in reference to Treatment.	Result to Patient, 1856.
26	58	20	2 grains	8th Oct., 1855. Shower-bath, tart. emetic, and blister. [<i>N.B. This patient improved his recovery to the shower-bath.</i>]	
				29th Aug., 1855. Admitted.	
				12th Sept., " Shower-bath.	
				20th " " Shower-bath, mix. tart. antimony occasionally, and blister.	
				3rd Nov., 1855. Repeat shower-bath, and hot bath at night.	
27	39	20	2 grains	27th Oct., 1855. Admitted.	In house.
				4th Nov., " He continues very excited, and is disposed to be very violent to others.	
				Shower-bath, liquid blister, & tart. emetic mixt.	
				12th " " Shower-bath, with 4 t. s. of mixture occasionally.	
				15th " " Continues the shower-bath, with the mixture.	
28	44	11	2 grains, and a 2nd Dose.	29th " " Shower-bath and ant. tart.	Cured.
				20th Dec., " Ditto with morphia and ant. tart.	
				30th Nov., 1855. Admitted.	

No.	Age of Patient on Entry.	Length of Bath administered, in Minutes.	When followed by Tartrate of Antimony, the Quantity.	Extracts from Case Book of Special Notes in reference to Treatment.	Result to Patient, 1856.
29	25	20	Nil	<p>30th Dec., 1855. Made savage attacks upon his attendants. <i>A shower-bath and a draught containing 2 grains of tartar emetic were ordered, when he became perfectly calm and tranquil.</i></p> <p>5th Dec., 1855. Admitted. Very violent. Shower-bath. Shower-bath occasionally.</p> <p>12th " " " " " "</p> <p>22nd " " " " " "</p> <p>21st Jan., 1856. Admitted. Very excited. Shower-bath and acetate of morphia. <i>Improved from this day</i>; was discharged cured on 1st March, 1856. [<i>N.B. This patient imputed his recovery to the shower-bath.</i>]</p> <p>16th April, 1852. Admitted. Struck the medical officer a few weeks ago for keeping him in confinement; he is sometimes abusive</p>	<p>Cured.</p> <p>Cured.</p> <p>In Asylum.</p>
30	39	20	2 grains		
	28	15 or 20	Nil		

No.	Age of Patient on Entry.	Length of Bath administered, in Minutes.	When followed by Tartrate of Antimony, the Quantity.	Extracts from Case Book of Special Notes in reference to Treatment.	Result to Patient, 1856.
32	about 40	20	2 grains	<p>and excited, thereby causing a great deal of discomfort in the place. Shower-bath.</p> <p>3rd Sept., 1852. Admitted.</p> <p>2nd Oct., " Shower-bath.</p> <p>10th March, 1853. Is in a state of lively mania, being much excited, with a disposition to mischief and violence.</p> <p>Shower-bath.</p> <p>19th " " Continues much excited ; shower-bath. Mix. ant. 2 oz. (2 gr. dose).</p>	

N.B.—The ages given, it will be observed, were those upon the Patients *entering* the Asylum. In many instances, therefore, an addition of several years must be made in order to show the age at date of treatment.

In looking carefully through the preceding tabulated cases, there does not appear to be one in which Mr. Snape has administered a bath of *thirty* minutes' duration. There are seventeen cases which were subjected to a twenty minutes' shower-bath; and eight who had a bath ranging from fifteen to twenty minutes. So it would appear that Dolley was the only patient in the asylum who had a *thirty* minutes' bath! Mr. Snape offers no explanation why he went, *per saltum*, from *twenty* to *thirty* minutes in this single case. It is clearly the first one in the records of the asylum in which a prolonged shower-bath of thirty minutes' duration was ordered. If there had been other cases of the kind, Mr. Snape certainly would have embodied the particulars in the tabular statement which he has put forward in his defence. But let us, for a few minutes, analyse these tables. Case No. 1 had a bath of "fifteen *or* twenty minutes," with one and a-half and two grains of tartrate of antimony. No result specified. Case 2—treatment the same: no result stated. Case 3—a bath of twenty minutes, with emetic mixture. Result—"Found beneficial." Case 4—a bath of fifteen *or* twenty minutes, with the emetic mixture. Result—"Prescribed with advantage." Case 5—similar treatment. Result—"Cured." Case 6—similar treatment. This patient appears to have been under treatment from the 2nd of February, 1852, and to have remained in the asylum until the 23rd of February, 1855, when it is alleged he was discharged "cured," by means of the shower-bath and emetic mixture. It is useless to trouble our readers with any further analysis; the tables are before them, and they can read and judge for themselves. It is, however, clearly apparent that the shower-bath and emetic mixture were almost invariably exhibited when the patient committed an act of insubordination, and was said to be violent, noisy, and destructive; leading one to the conclusion that these depressing agents were mainly employed to induce, on the part of the patient, docility and quietness. Whenever a patient is "noisy and violent," "breaks windows," exhibits "a disposition to violence," "disposed to be mischievous and violent to others," "attacks those around him with a knife," "abusive, and destructive of his clothing," &c. &c., he is immediately cooled down by means of the prolonged shower-bath and the "white-coloured mixture," *alias*, tartar emetic! Is this not an unjustifiable abuse of an alleged valuable curative agent? In cases like those previously cited, Mr. Snape's difficulty will be to persuade the public that the baths were not used as a *quasi*-punishment. It is clear by his own admissions that he has exposed himself to such an imputation. In the inquiry before the Commissioners in Lunacy, the following questions were put to Dr. Diamond:—

"Q. Did you ever order a shower-bath in the Male Ward when that department has been under your care ?

"A. Yes. I have once, and that has been in Mr. Snape's absence. One of his patients knocked out a tooth of one of my patients, and was guilty of violence.

It would appear by the above extract from Dr. Diamond's evidence, that one of Mr. Snape's patients, in a personal conflict, knocked out the tooth of one of his patients, and was subjected to a shower-bath ! In justice to himself, Dr. Diamond should explain whether he ordered the bath as a punishment, or as a remedial agent ? The facts cited by Mr. Snape, fully justify the suspicion that this highly eulogised mode of treatment has not altogether been confined to its strictly medical and legitimate uses. We cannot too strongly repudiate the idea of inflicting *punishment* upon the insane, in or out of an asylum. It should never be forgotten that the inmates of a lunatic asylum are *irresponsible*, particularly for actions committed in moments of maniacal and delirious excitement, and whilst under the influence of strong delusions.*

One word as to the duration of these much-vaunted baths. Many of the cases referred to in Mr. Snape's tables, were said to have had a shower-bath of "fifteen or twenty minutes" length. How is it that the *exact duration* of the bath is not stated ? Would it not appear that no accurate computation of time was made when the shower-baths were used ? A patient is ordered to the bath,—does the attendant stand by its side, with his watch in his hand, to measure the time ? If not, how easily may a man with the most honest intentions be deceived if he "guesses" at the duration of the bath. In *eight* of the cases referred to by Mr. Snape the time could not have been accurately computed ; for the patients are said to have been in the bath "fifteen or twenty minutes."

May not the same inaccurate measurement of time have crept into the other cases, where the period is positively stated ? The matter is clearly open to grave suspicion. The attendants employed to administer the baths, may unintentionally have deceived Mr. Snape as to their duration ; until we are satisfied as to the time being carefully computed, no conclusions as to the safety or efficacy of prolonged shower-baths can be safely drawn.†

* Let our readers imagine the following extracts from the daily case-book of a County Lunatic Asylum. A. B.—Violent ; broke six panes of glass. Ordered eight leeches to the head. F. G.—Kicked one of the attendants. A blister to be applied to the nape of the neck ; to be dressed, as an additional punishment, with turpentine ointment. G. W.—Tore his clothes. An emetic was administered. F. H.—Soiled his bed. Ordered to be cupped. P. T.—Shook his fist in the face of the medical superintendent, and used threatening language. Calomel and jalap to be given. A. J.—Destroyed his bed-clothes. Ordered a good dose of opium !

† Mr. Snape, with the view of establishing the perfect safety of the shower-bath

It appears that Dr. French, who officiated for Mr. Snape during his suspension, did not, on his first entering upon the performance of his duties, use the shower-bath at all. Mr. Snape says:—

“It appears that Dr. French, when first appointed, alarmed very naturally by my then position before the public, wholly refrained from using the shower-bath from the date of his appointment to the 14th of August last, a period of three months, *but used the plunge-bath in its stead.*”

The plunge-bath in lieu of the shower-bath!* The old story of *scylla* and *charybdis*. Have our readers any idea of what a plunge-bath is? If not, we will enlighten them. A violent and excited patient is taken forcibly by his legs, and plunged headforemost into an ordinary swimming-bath. He is not permitted the use of his limbs when in the water, but is detained there, or taken out and plunged again into the bath, until the *required effect* (?) is produced! Of course, quietness, submission to authority, docility, and freedom from excitement and violence, are the natural consequences of this *gentle* and *soothing* mode of treatment. Is it possible that in the present enlightened age an obsolete and exploded process of cure (?) like this should have been revived in one of our large county lunatic asylums, and that, too, in an establishment whose principal officer was under a cloud for an alleged abuse of prolonged shower-baths?

It would give us pain if anything that we have said in the preceding pages respecting the use of the prolonged shower-bath, were construed to the injury or personal disadvantage of Mr. Snape. We have always heard him spoken of as a humane man, anxious to perform every duty of life honourably and conscientiously. He has committed a mistake on this *one* point, and the best among us are not free from error.

Having been restored to an important official position as the medical superintendent of the male department of the Surrey County Lunatic Asylum; being intrusted with the lives, as well as with the care and treatment, of a large number of the most

used in the Surrey Asylum, exposed himself to its influence for a period of three-quarters of an hour; and, we are glad to report, escaped unscathed! This proves nothing. Mr. Snape is a healthy man; he went into the bath *voluntarily*, with, we presume, a determination to pass safely through the trying ordeal. How different to the case of a man suffering from a depressing disease, connected with an affection of the brain, or a shattered nervous system, forced into this bath, and detained there against his will! Mr. Snape does not tell us what he took before going into the bath, or what he administered to himself after he came out of it. We will venture to say that he did not take a dose of the white-coloured mixture.

* We have no hesitation in speaking in terms of unqualified disapprobation of the plunge-bath as a method of treatment, punishment, or discipline. Is it true that the plunge-bath is used as a means of treatment at St. Luke's Hospital?

dejected and helpless of the severely-afflicted family of man,—we have, occupying as conductor of this Journal a position of grave responsibility as a public instructor, conceived it to be our painful duty to discuss with considerable latitude, and unreserved and unrestricted freedom, the specific mode of treatment suggested by this gentleman for the treatment of the insane. We have spoken of the prolonged shower-bath and the tartar-emetic in terms of severity, but, we unhesitatingly maintain, in the strictest accordance with truth and justice. We have no desire to injure or disparage Mr. Snape, whilst exercising our undoubted editorial prerogative of freely criticising the principle of treatment he has recommended for our adoption.

*“Licuit, semperque licebit,
Parce personis, discere de Vitiis.”*

ART. II.—PROFESSOR FERRIER'S NEW SCOTTISH PHILOSOPHY.*

WHY Professor Ferrier should give to his system of philosophy a title which was only gradually extended as a mark of honour to the one it proposes to supersede,—and this, too, when it is not an extension, but a subversion, of the older system,—we leave to those who love to study character. To have won for his speculations a right to the title with which he has dignified them, he should at least have built upon the old foundation; and even then the imposition of so proud a name he should have left for others.

Reid won his laurels in defending the citadel of truth against the assaults of idealism and scepticism; and how did he do this? By stoutly contending for the veracity of the primary deliverances of the mind. Philosophers had given undue prominence to demonstration as the source of philosophic truth. To those fundamental beliefs which afford the data from which we reason, they had assigned a very subordinate place. Seeking to prove all things, they, one after the other, wandered into the maze of scepticism, or fell into the dream of idealism. But proof must at last repose upon self-evident truths. Here, then, is a source of truth independent of proof: on it Reid took his stand. True, it was that on which all, except philosophers, already took their stand. So much the better. Indeed, its universal recognition as a foundation evinced that it was the right one. Reid therefore decided upon siding with the “vulgar” against philosophers. “We are necessitated by reasoning,” says Hume, “to contradict

* Scottish Philosophy—The Old and the New. A Statement by Professor Ferrier.

the primary instincts of nature, and to embrace a new system with regard to the evidences of our senses." "It is a bold philosophy," says Reid, "that rejects without ceremony principles which irresistibly govern the belief and the conduct of all mankind in the common concerns of life; and to which the philosopher himself must yield, after he imagines he hath confuted them. Such principles are older and of more authority than philosophy: she rests upon them as her basis, not they upon her."

But had Reid done no more than vindicate the superiority of our primary convictions over every derivative assurance, he would have accomplished little more than most unsophisticated scholars do when they encounter the deformed half-truths of idealism, and the offensive insinuations of scepticism. Besides thus standing forth as the champion of common sense against the philosophy of the period—in which he was not original, being only the mouthpiece of the unphilosophizing millions—he laboured hard to quell the feud that had existed so long between common sense and reasoning, with regard to the cardinal point of philosophy; and it was his success in this important undertaking that constituted his originality as a mental philosopher. Hence, in a letter to Dr. Gregory he writes:—"It would be want of candour not to own that I think there is some merit in what you are pleased to call *my philosophy*; but I think it lies chiefly in having called in question the common theory of *ideas, or images of things in the mind*, being the only objects of thought—a theory founded on natural prejudices, and so universally received as to be interwoven with the structure of language."

Herein, then, consists the spirit of the Scotch philosophy; it maintains the veracity of those primary convictions which all men have in common, as to the existence, for example, of the material world as a *non-ego*. Reid, finding it impossible to doubt such convictions, determined to accept no theory of outward cognition that did not confirm them. The received theory was at variance with our fundamental beliefs: this was enough to satisfy Reid that it was erroneous. He consequently, with all the humility and patience of the true inductive spirit, resolved to find out the true explanation of his spontaneous assurances; and if he did not reach the desired land, he obtained a view of it, and left for his successors the result of his valuable labours.

Sir William Hamilton, with the strong spontaneous assurances of his predecessor, with prodigious powers of memory, yet with reflective talent second to none, performed for the common-sense philosophy what its most sanguine admirers could have wished. He corrected some of its errors; he laid its foundation deeper by a more rigid—we do not say complete—analysis, and brought to its aid, from the prodigious store of his learning, the corroboration

rative statements of philosophy from the dawn of speculation to the present day.

Now, however much Sir Wm. Hamilton has had occasion to differ from his predecessor, Reid; and however much he has reduced that philosopher's first truths to ulterior principles, he has always remained faithful to the spontaneous convictions of mankind; he is a true promoter of the genuine Scottish philosophy. He contends that every one who aspires to the name of philosopher should stanchly maintain, in opposition to any negative doctrine falsifying our fundamental beliefs, what is universally, because necessarily, believed; and "that nature is not gratuitously to be assumed to work, not only in vain, but in counteraction of herself; our faculty of knowledge is not, without a ground, to be supposed an instrument of illusion; man, unless the melancholy fact be proved, is not to be held organized for the attainment, and actuated by the love of truth, only to become the dupe and victim of a perfidious Creator."

It is not necessary, then, to admit the first truths of Reid as final; but it is all-important that we hold them to be truths, even though we have not yet arrived at the ground of their certainty. To call them vulgar prejudices that will not stand the scrutiny of philosophy, is grievously to mistake their nature; at all events, they are not on a par with ordinary prejudices; they are universal, and not to be dispelled, either by effort or by argument. The belief that the sun turned round the earth, did not exclude the contrary belief, as the issue proves; but the conviction that the mere material world exists, does, at least practically, exclude the contrary conviction; and this being the case, he is the truest philosopher who, admitting the authority of our spontaneous assurances, seeks the ground of it, rather than he who seems to rejoice in proving it to be fallible, as if what is universally believed must of course be philosophically false and vulgar.

Now, Professor Ferrier, although he claims for his system the paternity of Scotland, certainly cannot call it an extension of the older system; for being opposed to the primary cognitions of mankind, it must be similarly opposed to the conceptions of Reid, Stewart, and Hamilton; he consequently errs in giving his system a name that has so long been associated with a system radically different. "I hold," says Professor Ferrier, "that philosophy exists for the sole purpose of correcting the natural inadvertences of loose, ordinary thinking—that is her true and proper vocation; the old school, on the contrary, are of opinion that philosophy exists for the very purpose of ratifying, and if possible systematizing, these inadvertences. This is held by Reid and his followers to be the proper business of metaphysical science."

The proper business of Reid, Stewart, and Hamilton, has been to ratify and attempt to systematize the inadvertences of loose ordinary thinking! What a waste of time and talent! But who calls the convictions that Reid and his followers attempted to ratify, inadvertences? Professor Ferrier. What poor deluded mortals we are. But then, if we sit at the feet of Professor Ferrier, what shall we profit by it? we shall still have to carry our delusions with us to the grave. But are we, in the words of the truly great philosopher we have recently lost, really and truly "the dupes of a perfidious Creator." Monstrous supposition! No; what Professor Ferrier brands, with a veritable Coriolanus air, as the natural inadvertences of loose ordinary thinking, we shall continue to call spontaneous truths—truths that result from the constitution of the human mind, and which admit of being speculatively established; but which certainly can never be upset by any apparent demonstration—which every demonstration must be that leads us to regard them as inadvertences. Doubtless, Professor Ferrier is led away by the stubbornness of his reasoning; but where valid reasoning leads to such conclusions (O ye of little faith), there must be some flaw in the premises. Men of his cast of thought prefer admitting a demonstration to distrusting a pet principle which they have been at enormous pains to excogitate. Men like Reid and Hamilton prefer doubting the principle, to admitting an inference at variance with their primary convictions.

Without entering into the details of Professor Ferrier's system, let us simply examine his statement—that the *mere* material world has no real and absolute existence. His argument is as follows:—"The only material world which truly exists is one which either actually is, or may possibly be known. But the only material world which either actually is, or may possibly be known, is one along with which intelligence is, and must be, also known. Therefore the material world which truly exists is one, along with which intelligence also exists. Therefore the *mere* material world has no real and absolute existence."

We propose amending this argument by the addition of two small words: it will then run thus:—"The only material world which truly exists (*for us*), &c. But the only material world, &c. Therefore the only material world which truly exists (*for us*) is one along with which intelligence also exists. To the argument thus worded there certainly can be raised no just objection. But then it does not warrant the sweeping conclusion, that the *mere* material world has no real and absolute existence: this would be to prove more than is contained in the premises.

Now if there is really no *mere* material world, our only authority for the statement is consciousness. But how can con-

consciousness, from the knowledge it has of the *non-ego*, infer that the latter exists solely in connexion with intelligence? Only in one way: consciousness must be proved inseparably necessary to the absolute existence of the material world; so that if consciousness were to cease, the *non-ego* would cease as well; but to be known being a passive condition imposed upon the object by the active process of knowing, we have *primâ facie* evidence that it must exist antecedently to the imposition of this condition upon it by consciousness; for this condition is only a constituent of its *known* existence, not of its *unknown*. Let us enter into the matter more fully.

An object can only exist *for us* in connexion with intelligence. True: yet consciousness declares the object to be a *non-ego*, and if consciousness is veracious, a *non-ego* it is: then it is a *non-ego-cognised*: yet the *non-ego* is only causally, paternally* related to consciousness—that is, it is a *genus* paternally related to its *differentia*-cognised, forming the *species*—*non-ego-cognised*. Now, to this species, or synthesis, either element is indispensable; take away the *non-ego*, you destroy it; take away *cognised*, you destroy it likewise—you destroy the synthesis in which alone the *non-ego* exists *for us*. Therefore, *for us* there exists no mere material world, no *non-ego minus cognised*.

But, on the other hand, the *genus, non-ego*, being only paternally related to the *differentia*-cognised, the latter admits, in reality, of being separated from its *genus*, without obliging us to conceive that the *genus* is destroyed by the separation. "Admits, in reality, of being separated from its *genus*." What do you mean by that? In an act of perception, there are two elements, forming what we shall call, with your permission, a *biune fact* (object, *plus* consciousness); the minimum of existence *for us* being that contained in this *biunity*—that is, existence with this condition imposed upon it. Now, we mean that from this *biune fact* the object, element, is constantly passing away, leaving the other element as the remainder to record its presentation; but when it passes away, what becomes of it? Are we forced to infer that the separation of the other element from it involves its non-existence? By no means. Consciousness does not enter into its composition as a constituent part: it is a *non-consciousness*, consequently we cannot infer that, apart from consciousness, it does *not* exist; but can we prove that, apart from consciousness, it *does* exist? We believe we can—our argument is as follows:

In the order of knowledge, which is first to us, objects suppose consciousness (no consciousness no objects for us); but in the

* We postulate this proposition here, referring the reader to the sequel for the proof.

order of existence consciousness supposes objects (no objects no consciousness). Now, since consciousness in the order of existence supposes objects, the latter must be chronologically prior to the former, and consequently in the perception are only paternally related to consciousness in the order of existence, while in the order of knowledge the reverse is the case—that is, consciousness is causally related to objects in so far as they are *known* (not in so far as they *exist*) ; and it is the exclusive contemplation of this subjective side of the truth that leads to the incredible conclusions of idealism. Let us regard, as we ought, the subjective and objective sides of the truth with equal veneration, and then we have the philosophy of our spontaneous assurances—a philosophy not exposing their perfidiousness, but establishing their veracity.

There is a marked tendency among many philosophers to admit nothing into the category of existence but facts of consciousness ; meaning the *fact* of its testimony, in contradistinction to the *truth* of the same. They admit the existence of the traveller, but deny his narrative, or deem it unworthy of credit. Now, in so doing, they are unconsciously undermining the ground they stand upon. Consciousness reports its own existence—reports all its changes—so then, at the foundation of all existence, we have a communication, or revelation. This is *the ultimate fact*, even that on the credibility of which we admit the existence of consciousness of the revealing power itself. Now, if consciousness be not allowed to speak decisively concerning what, by its own showing, is *not* itself ; neither can it be allowed to speak decisively concerning itself ;* “for the maxim ‘*falsus in uno, falsus in omnibus*,’ must determine the credibility of consciousness, as the credibility of every other witness.” It matters not how conclusive your proof may be that consciousness exists,—and here we shall quote the clearest we know of,—namely, “that in doubting the fact of his consciousness, the sceptic must at least affirm the fact of his doubt ; but to affirm a doubt is to affirm the *consciousness* of it ; the doubt would, therefore, be self-contradictory,—*i. e.* annihilate itself.” It matters not, we repeat, how conclusive this proof may be, if the deliverances of consciousness are in the least incredible ; for this proof supposes them,† and therefore cannot be more credible than they are. So then we have no alternative left us, but to concede to consciousness the power of knowing a real *non-ego*. We can perfectly enter into the words of Stewart, therefore, when he says, “that the belief which accompanies consciousness, as to the present existence of its appropriate phenomena, rests on no foun-

* Hamilton's edition of Reid's works, page 746.

† As concerns *us*, everything that exists supposes the veracity of consciousness.

dation more solid than our belief of the existence of external objects ;" and we cannot fully coincide with Sir William Hamilton's views on this point.

Stewart means, of course, that *practically* we have as good ground for believing in the existence of external objects, as in that of internal phenomena ; and that this should be sufficient to win our *speculative* belief in the existence of either. Hamilton thinks this a mistake. If it is a mistake, it must be one in the speculative, not the practical sense. Stewart may not be justified in stating that philosophers had no better reason for admitting the existence of consciousness than of external objects, because Descartes, according to Hamilton and Cousin, had by a reasoning established the existence of the thinking subject, whereas no one had by a reasoning established the existence of external objects. Sir William Hamilton, relying on the conclusiveness of the said reasoning, gives up the argument from common sense, in respect to the *fact* of the testimony of consciousness ; and only considers it in so far as it enables us to vindicate the *truth* of the testimony of consciousness. While Reid and Stewart then assert that common sense is our ultimate authority, subjectively as well as objectively, Hamilton recognises "a reasoning" as our ultimate ground of certitude in the subjective sphere ; while in the objective sphere, he thinks with Reid that implicit faith in the deliverances of consciousness is amply justified. We regard Sir William Hamilton's contributions to philosophy, then, as in a state of transition from pure common-sense views to pure speculative. He gives what he considers a philosophical confirmation of the existence of consciousness, and its phenomena ; in fact, he apparently establishes, in a speculative sense, the first half of the doctrine of common sense. But why did he stop here, and lead us to suppose that speculative reasoning had no more to conquer.

Having gained possession of the subjective sphere, will it content itself with anything less than the objective as well ? We think not ; and had Sir William Hamilton boldly pursued the path he followed thus far, he would have arrived at a full speculative confirmation of the faith of Stewart, which he now considers a mistake. We feel assured that the mistake is on Hamilton's side, and that Stewart's faith is more to be relied on than his critic's inference. We feel convinced that consciousness is no more credible, and that speculative reason can discover no *better* ground for admitting its credibility, when it asserts its own existence, than when it asserts the existence of the *non-ego*. The veracity of consciousness is the ultimate fact, which we can neither *prove*, nor *disprove*, without committing a *petitio principii* ; and we cannot admit the testimony of consciousness as a

fact, without supposing the *veracity* of consciousness in revealing such a fact; and if we distrust our sensible perceptions, we are compelled also to doubt the very existence of the same, for, if they are not competent witnesses in their declarations concerning external objects, neither are they competent to report their own existence: for, *as concerns us, everything that exists supposes the veracity of consciousness.*

This leads us to remark that Mr. Ferrier, like many others, has been led astray by want of implicit faith in the integrity of consciousness. Did he believe that this involved the reception of the first truths of Reid as final? That he could not do, when many of them had already been reduced, or were in process of being reduced, to simpler elements. "The first truths of the old Scottish school have not only no value in philosophy, they have no value in any intellectual market in the world," says the Professor. Perhaps so, yet they are legitimate results of laws of thought, laws which at first have only an *implicit* manifestation, and depend upon reflection for their *explicit* development.

Perhaps the statement, that consciousness is trustworthy when its demands are complied with, is of no value in philosophy; yet certainly the proof of the statement must be a philosophical acquisition of the very first value; and, were it established, Professor Ferrier would have to concede that the *what* of existence, even in a philosophical sense, must be *simply* apprehended, before anything pertaining to it can be logically apprehended.

To come to the point, Mr. Ferrier states, that after much elaborate demonstration, and in opposition to the whole teaching of psychology, he has *proved* that existence is a compound, and not a simple; in technical language, that it is a synthesis of subject and object—a union of mind, and something else—which is not so strictly mind as mind itself is mind.* Now, in opposition to this, we state that consciousness has an immediate apprehension, an intuitive cognition of an object as a *non-ego*, i.e. *not* a union of mind and something else. This is a simple and ultimate deliverance of consciousness, a deliverance universally

* The writer in Blackwood's, June, 1842, on Berkeley and Idealism, has these words:—"Nature herself, we may say, has so *beaten up together* sight and colour, that man's faculty of abstraction is utterly powerless to dissolve the charmed union. The two (supposed) elements are not two, but only one; for they cannot be separated in thought, even by the craft of the subtlest analysis. It is God's synthesis, and man cannot analyse it." Professor Ferrier says—"The *mere* material world has no real and absolute existence. But neither is it a nonentity (I am no Idealist); for there is no nonentity, any more than there is entity out of relation to all intelligence." The writer in Blackwood's also says—"It is perfectly true that the existence of matter depends entirely on the presence—that is, either the real or the ideal presence—of a conscious mind. But it does not follow from this that there would be *no matter* if no such conscious mind were present, or thought of as present; because *no matter* depends just as much upon the real or the ideal presence of a conscious mind." What are we to infer from these coincidences?

acted upon. But some men are not disposed to confide in it speculatively, unless some reason can be discovered to exclude the supposition of its being untrustworthy. Must we, therefore, prove the existence of external objects, or cease to contend for their reality? By no means: we have two alternatives still, which must be destroyed before we are brought to such a pass as that. In the first place, if *we* cannot prove the *existence* of the *mere* material world, *you* cannot prove its *non-existence*. So far then it is a drawn battle, but now we have a reserve to bring up, and you have not. We have an immediate perception of an object *as* numerically different from the conscious subject. It is more rational, therefore, to believe in the reality of the external world than not. But, in the second place, if we cannot prove the independent existence of the *non-ego*, it still remains competent for us to admit its existence without direct proof, and seek only to *prove* the veracity of consciousness in general, and consequently in its immediate perceptions. Well, then, is consciousness possessed of infallible integrity? We refer to what we have written above; but, let us ask, what part of the mind is it which demands to be thus satisfied? Certainly not the primary faculties. Immediate perception assuredly does not doubt its own sincerity. The conviction that there is an object numerically distinct from our apprehension of it is the very essence of sensible perception; the absence of such a conviction involves the absence of the perception also. Whence, then, the suspicion as to its truthfulness? It is one of reasoning's raising; it is entirely speculative; it cannot be practically entertained, *i.e.*, having the perception we cannot by any amount of effort will away the conviction which is absolutely essential to its existence. Now, reasoning can be satisfied with nothing less than absolute demonstration. Is it possible to render it the satisfaction it demands? Sir William Hamilton has done very much to make speculative doubt of no reputation, but he has not done enough to exclude it for ever from every sane mind. He has certainly *apparently* shown that in themselves as apprehended facts, or actual manifestations, the deliverances of consciousness are above all scepticism; but what we think of this, we have already stated. We think that Hamilton, since he evinced a disposition to grant the claims of reasoning in the subjective sphere, should have gone farther, or, at least, have admitted the possibility of reasoning's ratifying *all* the deliverances of common sense, whether they regarded self or not self.

We cannot avoid thinking that the Scotch philosophy has not exactly realized its intention. We think that while contending for a source of truth prior to demonstration, in which it is quite right, it carries the contest too far, and usurps the province of

reasoning. For instance, Reasoning asks to be assured of the faithfulness of immediate perception, and Common Sense puts on the air of wounded honour, and feels surprised how Reasoning can be so basely suspicious, indeed so insane, as to doubt for a moment the integrity of a friend—a friend in whom she must practically confide, whether she will or not. But poor Reasoning is really wronged by such usage ; she has a right to make her demand, and will continue to make it till all doubt disappears.

Let us fully understand the point. Reasoning not only demands proof of the veracity of the primary deliverances of consciousness, but even calls itself to account, and seeks to prove that it is not self-deceived. Now, we humbly conceive that the Scotch school, as well as defending Common Sense against Reasoning, should have defended Reasoning against itself (*i.e.*, reasoning regarding its objects, against reasoning regarding itself). The Scotch philosophy, we conceive, when rightly understood, is a protest against the practice of openly or virtually doubting the veracity of the mind—of our reasoning as well as of our intuitive faculties ; and it errs when it takes upon itself to interdict any inquiry that speculative reasoning, which is not satisfied with the mere testimony of immediate perception, may make for its own peculiar gratification. But we must hasten back to the road from which we have digressed.

We have shown that many truths have to be received on the testimony of intuitive perception alone, and that the only proof they are susceptible of is an indirect one, namely, a proof of the veracity of consciousness. Had Prof. Ferrier sought to demonstrate this veracity, he would have done wisely ; but attempting, as he does, to prove what is immediately apprehended, is simply an abuse of one's reasoning powers.

We stated above, that consciousness is veracious when its demands are complied with. The first clause of this sentence we have just considered ; it remains for us to say something also about the second. The demands of consciousness we call, in other words, *its forms*. Now, neglecting the question of veracity, and striving to discover the form in which we discover new truths or principles, we call to mind Bacon. Neglecting to discover the form in which consciousness acquires first principles, but adopting the ancient deductive method, and labouring to establish the existence of consciousness as a basis of certitude, we call to mind Descartes. Bacon's method has been productive of an immense accumulation of scientific truth. Can we say the same of Descartes' ? We cannot ; and why ? Because he missed the forms, without the observance of which the principle of certitude does not apply ; whereas, if the forms be observed, the principle applies, though it be yet unnoticed.

Having shown that consciousness was the ground of all certitude, had Descartes substituted as the condition of that certitude Bacon's rules instead of the axiom—All clear ideas are true, what very different fruit would his method have borne. Consciousness is not to be regarded as a voucher for truth, when ideas are merely clear and distinct, as the result of the Cartesian philosophy so deplorably evinces. Indeed, Leibnitz's improvement upon this last, although a step in advance, does not quite bridge over the chasm which divides the inductive from the deductive method. And Mr. Ferrier, evidently continuing the same search, has yet to learn that the principle of contradiction is an essential part of inductive reasoning, and has not found in his pages its true place and formal enunciation. We mean to say, that if truths were not previously felt to be necessary, Prof. Ferrier's test would not prove them to be such. Take an example: Two straight lines cannot enclose space; you question the universality of this truth, how are you to be convinced? By laying down the counter-statement, Two straight lines can enclose space; we then perceive that this contradicts the conception which we must form of two straight lines. But must it do so for ever. Must it do so in the moon? The test is only effectual, as far as we can apply it in any number of conceptions we may choose to call up. But any number of such testings does not amount to infinitude, and consequently does not necessitate a universal conclusion. If then, for the sake of argument, we do not admit the proposition, that two straight lines cannot enclose space, to be universally true, we do not perceive that Mr. Ferrier's criterium forces us to do so; because it is not proved to us that in the counter-statement the predicate must necessarily, must always, be subversive of its subject. Enclosing space must be proved to be the positive cause of the absence of straightness in the two lines; and not enclosing space the negative cause of the presence of straightness in them, before we are warranted to conclude *formally* that two straight lines can *never* enclose space. But how is this to be done? That is the question. Prof. Ferrier must go considerably farther into the interior yet.

While upon this subject, we would take the opportunity of stating that we have evidence of two kinds of necessity; and that we think that Professor Ferrier comes down rather hard upon Mr. Cairns for suggesting, after Sir William Hamilton, that there is more than one. There is—1st. The necessary junction of one fact with another, perceived by us as an inference necessitated by the comparison of two propositions; and, 2nd. There is the universal junction of one fact with another, wherever or whenever that other exists, perceived by us as an inference necessitated by the law of contradiction; and now we

would intimate to Mr. Ferrier that a counter-statement is not necessarily contradictory to a proposition, the necessity of which is not previously proved, or capable of being proved, as alluded to above. (No. 1.)

Before we conclude, we cannot help recording our conviction that Professor Ferrier has done well in so forcibly drawing attention to the not sufficiently recognised fact, that, *as concerns us*, objects only exist in the *biune* fact of perception; but then, like most system-builders, he makes his truth four-square, when it is only half that. He errs in supposing that the subject-object is an essential part of the object-object; and he is right in asserting that the object-object only exists *for us* in connexion with the subject-object; but again he errs in supposing that the external world can exist only under the condition in which it exists *for us*. Perception, so far as we have been able to analyse its contents, is—I. Consciousness. 1st, revealing itself; 2nd, as revealing a not-self—*plus*. II. The not-self, which it reveals. Revealing itself, as revealing a not-self, is the one element, the not-self is the other; and they are numerically different—the knowledge element, for instance, is not a component part of the other element. Professor Ferrier, therefore, commits an immense oversight in not severing consciousness as a *self*-object from the *not*-self object, when consciousness itself does this in *so positive a manner*. “Positively truly,” says Mr. Ferrier, “but inadvertently!” This is the natural result of placing the *fact* of the testimony of consciousness before the *truth* of that testimony—the derived before the ultimate.

ART. III.—AUTOBIOGRAPHY OF THE INSANE.

IN continuance of our series of papers illustrative of the phenomena of insanity, as delineated by those who have suffered from the effects of alienation of mind, we reprint, with much pleasure, an interesting paper which appeared in the July number of the “*American Journal of Insanity*.” It is written by a young gentleman of talent and literary pursuits, who was a patient in the New York State Lunatic Asylum. He suffered from an attack of acute mania, attended by considerable physical prostration, following a protracted attendance upon religious exercises. The disease was of five months’ duration when he was discharged recovered.

MAN, the most perfect and complicated in structure of all God’s workmanship, is at the same time subject to the greatest number and variety of injurious agencies. This liability is, indeed, a natural consequence of the complexity of his organiza-

tion. Possessed of a composite nature, in which the material and spiritual elements are strangely interblended and harmonized, he is at once subject to the imperfections and evils incident to both. Add to this the effect of highly artificial modes of life, by which nature seems crossed and thwarted at every turn, and of unnatural habits voluntarily contracted, which add insult to her injuries, and the passage from the cradle to the grave is like running a gauntlet of perils, from which it is really wonderful that so many escape unharmed.

"The ills which flesh is heir to" may be classified under three general heads: those diseases which attack the body exclusively; those which affect the mind exclusively; those which impair the connexion between the mind and body, and hence are commonly called nervous. The first of these classes has occupied the attention of men from a very early period in the world's history, and the treatment of it belongs entirely to the science of medicine in its various branches. It is of the second class that I wish to speak.

That species of disease which attacks the mind, producing insanity in its various forms, though it has always been prevalent in the human family, and is often more dreadful in its results than any other, has, till within a comparatively recent period, received but little medical attention, probably because it has been thought incurable. The ancients considered insanity as a direct visitation from the gods, and the famed hellebore, which grew in the island of Anticyra, was supposed to be a cure for it. In the New Testament the insane are spoken of as those possessed with devils, and the miracle of casting out devils is now supposed to have been the restoring the lunatic to reason. Herman Melville, in "Typee," tells us that in the South Sea Islands lunatics are revered as a kind of inspired or sacred personages, and accordingly allowed the largest liberty. It is only in the most enlightened countries and in modern times that asylums have been founded, and systematic efforts made in the treatment of this formidable and mysterious disease. France, foremost in the pursuit of science, and at the head of all modern nations in works of public benevolence, has led the way in this also. There commenced that course of treatment now universally practised, by which such great advances have been made in the art of "ministering to a mind diseased." Instead of chains and brutal cruelty, which only serve to madden still more hopelessly the unfortunate wretch, kindness and sympathy have been substituted; and it has been found that these would often illumine, and sometimes entirely dispel, the Cimmerian night in which many a noble spirit lay enshrouded.

This was a great forward step in the management of insanity,

but it was only the beginning ; the business of accurately classifying and scientifically treating the various forms of mental derangement has yet to be accomplished. Its types are so numerous and peculiar, that it would be almost impossible ever to arrive at an accurate analysis of all of them. The most comprehensive classification, including all the varieties of mental imperfection and disease by which man is unfitted for the exercise of his powers as a rational being, would seem to be something thus : radical deficiency of intellect, which constitutes idiocy ; total derangement of all the faculties of the mind, by which the mental equilibrium is entirely overthrown, and the intellect, moral sentiments, passions, and appetites, are thrown into a complete chaos of elements, of which the primal chaos of the material world was but a feeble type ; excessive activity or predominance of some particular faculty, sentiment, or propensity, or the entire occupation of the mind by some leading subject of thought, till the perceptive powers become distorted with regard to all objects connected with that object, while they remain correct on all others—this is insanity ; disordered state of the nervous system, or the connecting medium between mind and body, which gives rise to hypochondria, optical illusion, and to which spectral appearances and ghost stories are said to owe their paternity.

All these forms of mental disease are complex in their character, or at least in their first symptoms, and require to be considered under two aspects, physical or physiological, and metaphysical. Since the causes of insanity are usually of a mixed character, and the disease itself almost always so, the treatment should be addressed both to the material and spiritual nature of the patient. This is what renders it difficult. Ordinary insanity often arises from excessive mental activity, by which the nervous energy is withdrawn from the general system and concentrated in the brain. Of the efficient causes of this species of insanity it is not necessary to speak. They are numerous, and will be found enumerated in the journals of insanity ; but of the proximate causes or symptoms, want of sleep is the most common and obvious. When a man's "soul gets into his head," to the extent that he cannot sleep, he is in a bad way, and had better speedily adopt some means of driving it out again.

People with large, active brains and comparatively small vital powers are peculiarly liable to mental derangement, while, on the other hand, persons of predominant vital temperament have comparatively little to fear from it, for if there is a temporary excess of cerebral action, the heart, lungs, and stomach soon reassert their supremacy. A scrupulous attention to the laws of

health, in relation to free, pure air, abundant exercise, suitable diet, cheerful employments, an abstinence from all exciting agencies, and an habitual exercise of calmness and self-control, will generally suffice, even with persons of high nervous temperament, to keep the vital powers in vigorous action, and hold the mind within the traces. A man should never become so scientific, so sentimental, or so religious, as to forget his dinner; for it is far better to vegetate, or lead a merely inert, animal life, than, like a comet, to "shoot madly from our spheres to affright the world."

With regard to the treatment of insanity, as has already been observed, it involves a course physiological and metaphysical. The body is first to be attended to, the nervous equilibrium restored, so that the patient shall eat and sleep well. When proper means are used at the commencement, while the patient is still rational enough to co-operate with the means, no doubt the symptoms might often be averted; but when the mind becomes completely disorganized, and the brain has begun to boil and seethe in good earnest, it is not easy to reduce it again by any material remedies. Narcotics and stimulants have but little effect at this stage of derangement, for the whole system seems to adapt itself readily to this new order of things; so that while the exciting causes may have long been removed, and the scathing billows of fire have retired, in some measure, within their original limits, the once stately edifice they have assailed remains a charred and desolate ruin, which no skill on the part of the apothecary can reconstruct.

The patient may eat and sleep with tolerable regularity again, while the mind is entirely unsettled. There only remains, then, a resort to the other method of treatment, and here a wide and unmapped region is laid open to the humane and skilful physician. He will here find that more depends upon his native good sense, knowledge of human nature, and natural sympathy, than upon his medical education. The forms of mental hallucination are so numerous and so subtle, that it is very difficult to unravel the tangled mass, and dissect out a single straight thread of thought, by the skilful management of which reason may be restored. There is usually some leading idea, some ruling fantasy in the mind of an insane man, which is the cause of all his trouble. This becomes, in the hands of a skilful physician, a decoy duck, by the successful management of which the whole flock may be secured; or, to use a still better figure, this *ignis fatuus*, which leads the poor benighted traveller through bog and briar, and hopelessly bewilders him in pathless solitudes, may become, when caught and guided by a kind and skilful hand, the beacon-light of his salvation, by which he may be softly guided

back to the old highway of reason and happiness. It is not by flat contradiction and coercion that the deranged mind is set right: this at once provokes enmity, and the lunatic meets it with a total scepticism, which converts his best friends into liars and demons plotting his destruction.

Some one has very shrewdly remarked, that the difference between an idiot and a lunatic was simply this—that the former reasons falsely from correct premises, and the latter reasons correctly from false premises. With regard to the lunatic this is undoubtedly true in many cases. He is the most skilful of sophists; every minute and casual circumstance is turned to account in supporting his false theory; he weaves a chain of the most subtle and elaborate error, which requires the utmost gentleness and caution to untwist. He must be headed off by strategy, and led, for he cannot be driven, out of his delusion. He must be managed like Dominie Samson, in *Guy Mannering*, who had a soul so much above buttons that he could not be persuaded to put on a new suit of clothes; and the only means by which a change could be effected, when his old ones became too much worn, was by stealing into his room at night, while the worthy Dominie was asleep, taking away the old ones and hanging the new garments on the chair; so that when he arose and dressed himself in the morning, he incontinently put on the new breeches, without discovering the change till they were fairly buttoned, or rather not discovering it at all. Let some one correct, rational idea be substituted in the place of a false one, and that, too, without sensibly disturbing the superstructure, like putting a new sill in a building, and it often paves the way for a gradual and complete recovery. It becomes, as it were, a nucleus or centre of attraction, round which all the rest will slowly cluster in regular order, and thus a new, and sometimes more beautiful, creation emerge from the chaos. To accomplish this successfully, indirect methods are generally the best. For example, it is quite a common delusion with the insane that he is in the supernatural world; he loses all cognizance of time, and supposes eternity has commenced. In such a case there is but little use in denying this before him. He will believe you to be an emissary of Satan, sent to mislead and ruin his soul; but leave in his way a daily paper of a late date, or, if he be of a literary turn, a new book, by some favourite author, and the error will correct itself.

It would be a curious and interesting speculation to inquire a little into the pathology of insanity, with a view of arriving at a metaphysical analysis of it, so as to ascertain, if possible, in precisely what psychological change it consists. The error would probably be found not in the reflective or reasoning faculty so

much as in the perceptive or seeing faculties, by which all external objects and their relations are viewed through a false medium, and distorted into unnatural shapes; hence the imagination, which draws upon the perceptive powers for its materials, becomes filled with wild and delusive images. In most cases of total insanity personal identity or consciousness is lost, or merged in the general chaos; and hence also it is, that the lunatic believes himself to be some other person—a hero, or prince, sometimes the devil, and sometimes the Deity himself. Without dipping too deeply into metaphysics, we might venture to suggest that the human mind, in a healthy state, is neither a simple unity nor a plurality, but rather a confederation of powers, and that consciousness is the quintessence or product of their combined and harmonious action; just as the government of the United States is the product of the combined governments of the several States, so that “*E pluribus unum*” would not be a less appropriate term as applied to the mind than to our country. In this consciousness we may suppose the soul resides in its normal state. The perceptive faculties are to the soul what the police is to a city—by them all passports must be *visaed*, so that in the rational mind no ideas of external things or their relations are allowed to enter which do not correspond with realities: thus truth and reason are maintained. But when insanity takes place, this harmonious confederation is broken up, and each becomes a petty sovereignty, independent within itself. A unity of action is lost, the perceptive faculties become careless, the gates are thrown open, and any gigantic fantasy may walk boldly in and usurp the seat of government! At the same time the spontaneous action of particular faculties may be unimpaired; the memory may be perfect, the moral sentiments correct, and the affections and sensibilities active; but all legitimate communication is cut off, unity is destroyed, reason is deposed, and the soul is a wreck:

“Ever drifting, drifting, drifting
O’er the shifting currents of the restless main.”

The ideas of space and time, which are the fundamental conditions of all thought in rational minds, become confused, or wholly lost.

A few facts from my own experience may illustrate this point more clearly. The first symptom of insanity in my own case was want of sleep. I was myself conscious of this need of natural slumber as well as my friends, and tried in vain to obtain it from narcotics. The very consciousness of the fact that I needed repose, and my efforts to obtain it, only aggravated my excitement, and my brain grew every day more and more disturbed.

At last I began to imagine that the final dissolution of all things was coming on, thus transferring the tumult in my own mind to external nature. I was removed from the place where I was then residing, to be conveyed home in a carriage, a distance of some thirty or forty miles. It was on the Sabbath, in the month of October, and one of the most lovely days of "Indian summer." A golden haze overspread the earth, through which the blue peaks of the Catskills loomed softly on the southern horizon. Had I been well, I should have enjoyed the ride, for Autumn is my favourite season of the year; and as it was, the exceeding loveliness of the season stole in upon my fevered brain with something of its old effect. I imagined that it was my last look upon that earth that had once contained for me so much gladness and beauty. The rustling of the dead and dying leaves, and the smoking light that lay over all the landscape, confirmed the impression:

"The sun's eye had a sickly glare,
The earth with age was dim."

The houses as we passed seemed empty and desolate (which was, indeed, true, since the people were all gone to church); scarcely a living object met my eye, except a few people that were passing on foot or in carriages, and even they seemed more dead than alive; their faces wore a semi-inanimate, unearthly expression. As I gazed with weary, half-shut eye down the long valley, and across the brown woods that stretched away to the base of the distant mountains, there came into my mind, with sublime and soothing effect, and with all the force of reality, this fine sentence, which I believe to be found somewhere in Holy Writ—"And I saw all the kingdoms of the earth in a vision." The roads were smooth, the horses sped along briskly, and I believed this prophetic utterance was to be literally accomplished in my own case, and that I was thus, amid the profound stillness of universal nature, to ride over the whole earth, now fading with its last autumn. During the ride I struggled once to escape from the man who held me by his side, and displaced a bandage on my arm, where I had been recently bled. The blood flowed again copiously before it could be bound up, and this, together with the fatigue of my efforts, so exhausted me, that, when at evening we reached a small town on the banks of the river, my vital strength was nearly spent. I lay faint and weary, and gazed dimly upon the water while waiting for the ferry-boat. The bells were ringing for the evening service, and the streets were filled with people flocking to church. The full moon was rising in mild splendour over the eastern hills beyond the river, and the evening wind was just curling the water into a ripple. I thought

the river was no other than the Jordan of Death, across which I was about to pass into the happy country beyond, and that the whole world was following me to judgment. While crossing, I turned my eye up the stream, and as the soft light lay upon the water, and the white sails of the sloops dotted the long vista, a sense of unutterable beauty filled my soul. When we were on the other side, and had nearly reached home, we passed through another village, where the bells were again ringing, and a stream of people passing along to church. I recognised every familiar object, but the same idea continued in my mind, and it seemed the bells were tolling, and the nations coming up to judgment. After I reached home I must have slept for some time, for when I next woke to consciousness I cannot precisely determine, but it seemed that the demons of madness were pursuing me again. I fled back into the scenes of the Jewish dispensation for repose. I found myself transferred into the early history of the world.

About this time the fall rains set in, and I supposed myself in the ark, flying through the stormy waters. I was lying in an upper room in the house of my brother-in-law, and as I looked out at the dreary weather, everything conspired to favour this delusion. The window-curtains were parted so that the space through which the light came in, was in the form of a steep lattice-roof, such as I remember in the old pictures of the ark. Here I obtained a short repose, but the pursuing fiend found me again, and drove me abroad through boundless space. Then every muscle and nerve seemed wrought to the utmost tension, and I imagined that the world was again dissolved into chaos, and that all living things had perished, but that I had found out the great secret of Nature, and through me the universe was to be reconstructed. I thought that I was the living, intelligent principle of electricity, and that I had power to call into my own person all the electric fluid in the world; and thus I was to give life again to my friends and others. My father had lately arrived, and he made a remark in my hearing which partially gave rise to this idea. He said he heard the wires of the electric telegraph ring as he passed along the road. I thought all the telegraph wires in the United States were employed in conducting the fluid into my body; and this gave me unnatural strength. I thought I was moving by some attraction towards the sun, and that there, in the opaque centre of the great luminary, I should at last find an eternal rest, and rejoin my friends and kindred. But these periods of intense excitement were followed by great nervous prostration, and then I would seem to lose again all my powers, the electric fluid was dispersed, the spirits of my friends were scattered again, and I seemed to be sinking through immeasurable depths of space, when I was just on the point of achieving

immortal happiness. Again, as I had almost gathered in the scattered spirits, and the new earth was about complete, a comet struck us, and we were dashed into numerous fragments, upon which we were hurled flaming through the universe. Then there was a great battle in the sky, among hostile powers; some of my friends were upon separate fragments, and vast gulfs of fire yawned between us. I was left upon one small piece, with only two persons with me (these were two men who sat up with me through the night). A lurid light surrounded us, and these were enemies with whom my father, upon another fragment, and with a large squadron of my friends, was about to do battle for my recovery. I must have slept very little during this time, which was only a week, though it seemed to me a century.

The familiar faces of my friends, as they came into the room, would seem for a time to partially restore me to reason, and bring me back to the earth again. Then I heard sounds of harmony, and a noise of chains, and the voices of men outside the house, and I imagined they were trying to bind me to the earth, and attaching all the oxen and horses in the world to draw me back when I was endeavouring to fly away. Again, I would seem to rise in the air, and the house became a balloon, floating above the town in the gaze of assembled thousands. At last, failing to find rest for my soul, I fled still farther back into the past history of the world, for the purpose of reaching a period in the human race as remote as possible, or even anterior to the existence of men, so as to include all that had ever lived in the new creation, and thus reconcile all hostility among contending spirits. I betook myself to Grecian mythology, and became Apollo, or the sun himself, the source of all life.

When I was removed from the house to be conveyed to the Asylum, I suspected there was some design upon me, and resisted; but when I got into the carriage, and two of the gentlemen who accompanied me sat with me, while the third mounted the box and drove, I thought he was Phaëton, driving the horses of the sun, and that I ought to be doing it myself; and then the men by my side kept saying to me, "Never mind, sit still; he don't know the team, he don't understand the horses." Whether anything of this kind was actually said I know not, but it confirmed my impression; and though I felt personally secure from harm, I feared he would destroy himself, and produce universal ruin again, by driving my coursers. When we drove up to the Asylum, its imposing front made quite an impression upon me. I had some idea of the true character of the building, but the predominant fancy overruled it, and the building became the temple of Apollo, into the possession of which I was about to enter, as my rightful residence.

Then followed a period of unconsciousness, broken here and there only by impressions vivid enough to be recalled to memory. Heathen mythology became mixed with modern astronomy, and I was transferred from Apollo to Mars, and became the god of war. At this time I was very violent, and struggled fiercely with my attendants; finally, getting no repose, and finding that I saw my friends no more, I despaired of getting back again, and thought myself a comet—the living intelligent head of a comet—flying through space with inconceivable velocity, and passing far beyond the confines of the habitable universe, thus leaving my friends hopelessly behind me. I lost all sense of time and space. A whizzing and careering through trackless solitudes, a sense of rapid and lonely motion at an incalculable rate, and a sinking of the heart in utter despair, are all I can recollect. But at length I began to notice the succession of day and night, and observe things about me; then, to be sensible of hunger and thirst and clothing. This checked my career, and I now believed my friends, with the other inhabitants of the earth, were in the planet Jupiter, and that a cable had been passed over to me, by which I was moored alongside, or rather, held attached, though still at a great distance. Along this rope they passed me food and drink and clean clothes, and the spirits of my nearest friends came across, and entered the bodies of those whom I saw around me. One of the attendants I took to be my brother, though he resembled him but slightly; another was an intimate friend, while another was my implacable enemy.

I began gradually to realize my situation—to feel that I was confined within stone walls. I tried to escape from the window, and should have precipitated myself boldly from any height, for I had no doubt whatever that I should fly direct to Jupiter, could I get into free air. An ethereal lightness seemed to pervade my whole frame, and the great stone edifice itself appeared to be sustained in mid-air. It was a long time after I began to recover and walked out before the earth seemed firm and resisting under my feet. During the day I enjoyed myself tolerably well, while I was permitted to walk the hall; and the sight of the sun, when he occasionally appeared during the cloudy days of mid-winter, rejoiced me greatly; but at the approach of night I fancied that I was falling into the power of evil again, and the lighting of the gas was very obnoxious to me. I tried to blow out the light, and once pulled down one of the gas-pipes, supposing that thereby I could hide the darkness and restore the dominion of the sun again. At last—

“All these sharp fancies by down-lapsing thought
Streamed onwards, lost their edges and did creep,
Rolled on each other, rounded, smoothed, and brought
Into the gulfs of sleep.”

From the time I began to sleep soundly, my recovery was sure. But every night I visited Jupiter, and had entrancing visions of loveliness spread before me. I could see the convexity of the planet rising slowly before me, but yet swaying to and fro as if in uncertain equilibrium; and heaving and tossing like a balloon, or a ship at sea. From this delightful abode, I was invariably driven by my pursuing demon, and brought back to my prison again, notwithstanding the superhuman efforts of my friends to save me. About this time the news of the death of Daniel Webster, and the result of the presidential election, in which I had been considerably interested, began to make some impression upon me. At length, one day, I happened to see a new book by Ik. Marvel, and a January number of the *Opal*, and this established a correct idea of time. Then I enquired the day of the month, and began to keep that, as also the days of the week. Still there was a vast chasm behind me, and I thought I had been here millions of years. I was astonished to find, upon inquiry, that it had been but little more than two months. From this time forth I recovered rapidly. My delusive fancies broke up, and began to recede from my mind like the figures in a dissolving view. I adopted the State Lunatic Asylum as a fixed fact, and began to accommodate myself to my situation.

Such are some of the facts in my own experience of insanity. It will be seen from this, that the first step towards recovery is to correct the perceptions, so as to make things seem what they are, or what they seem to rational people—in nautical phrase, to take an observation, ascertain bearings and distances, and write up the log. After once recovering the ideas of time and space, and firmly fixing them, consciousness will come back to its original seat, and adapt itself again to realities. Thus the great material universe will finally swing round again to the senses, and the old order become re-established. Sometimes a sudden surprise, such as the appearance of a long-absent friend, the news of the death of a beloved one, or some other remarkable occurrence, will accomplish this at once, and restore reason instantaneously. In such cases there seems to be a powerful reaction, as if the mind were jerked back into its socket, like a dislocated shoulder-blade. I have no doubt the sudden appearance of valued friends, a few weeks after I was brought here, would have had this effect upon me.

When public benevolence reaches such a height, or the means of patients are so ample, as to induce the medical faculty to investigate the subject more thoroughly, so that scientific principles can be more generally carried into effect in the treatment of insanity, much greater success may be looked for, and, doubtless, many cases now regarded hopeless would be found not incurable.

ART. IV.—NOTES ON BELGIAN LUNATIC ASYLUMS, INCLUDING THE INSANE COLONY OF GHEEL.

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PREFACE.

HAVING communicated in former numbers of the *Psychological Journal* various observations collected during several recent visits made to French and Scottish Lunatic Asylums, I am induced, by the notice they then received, again to resume a traveller's pen, in order to describe cursorily the present condition of different Belgian institutions inspected during last autumn; including particularly, the insane colony of Gheel, which seems not only the most remarkable, but is actually the oldest existing establishment for maniacs throughout Europe. Previous however to entering upon such tasks, one or two general remarks respecting the lunacy laws of the country just named, it is hoped may not prove inappropriate, or be thought altogether superfluous.

Like England and France, considerable alterations have been made, of late years, in the laws affecting lunatics, as also regarding the administration of Asylums in Belgium. The most important measure recently passed being the Legislative Act, dated 18th June, 1850; according to which, questions connected with lunacy institutions, and the management of patients attacked by mental disease, are now regulated. That enactment was followed, on the 1st of May, 1851, by an ordonnance of King Leopold, containing general and organic rules to explain more fully the previous law, and its practical application. In order to give British readers some idea of these new regulations, it may be briefly stated that, no person can either open, or at present direct, any institution in Belgium destined for the treatment of lunatics, without first obtaining the authorization of Government; whilst a similar permission must also be procured, for the continuance of all hitherto existing insane establishments.

Every house in which, not only several, but even one lunatic resides—not being a relative of the individual under whose care such person is placed, or unless with the curator, tutor, or provisional administrator—is considered an insane institution. Before granting a licence to receive lunatic patients into any building, it is required—First, that the situation be salubrious, the locality well aired, of sufficient extent, and have convenient interior arrangements. Second, that the sexes are separately lodged, and classified according to the nature or requirements of their

respective mental maladies. Third, that medical and sanatory officers be attached to each establishment, with sufficient accommodation for the wants and condition of the inmates; and, Fourth, that the permanent deputation, appointed for such purposes, must renew, every three years, their approval of every professional attendant. This body, or "College," as it is now denominated, may also modify the medical staff, order the dismissal of any official, in cases of grave negligence; or should he have omitted to perform duties legally required. An appeal may, however, be made to the King against such sentence.

According to other regulations also in force, no insane person can be at present received into an asylum, excepting as follows:—First, upon the written petition of the tutor of an interdicted party, accompanied by a resolution passed in the "Conseil de Famille" for that purpose; but in cases where interdiction has not yet been pronounced, the provisional administrator must petition. Second, on the demand of a local authority empowered to grant domiciliary assistance to pauper lunatics. Third, in virtue of the decision by a local judge, according to the 95th article of the communal law. Fourth, in execution of an order at the suit of a public ministerial officer. Fifth, upon petition of any person interested in the patient; but specifying the nature of their intimacy, the particulars of the alleged case, and any degree of relationship, or affinity, which exists betwixt the applicant and lunatic. All these documents being further countersigned by the commune Burgomaster, where such insane persons are found, or reside. Lastly, upon a decision of the permanent deputation appointed by the Provincial Council. In urgent cases, however, this order may, nevertheless, be made by the Governor alone; but, in all such examples, every fact must be reported to the Council, at their meeting next ensuing.

In each of the preceding modes, excepting that first named, a medical certificate must be likewise produced, describing the party's mental condition, whom it is proposed to place under treatment, as also every particular symptom characterizing the actual disease. This document should neither bear an older date than fifteen days, nor be signed by any medical officer of the establishment, to which the patient is consigned. However, in very urgent cases, the usual medical certificate may be dispensed with at the moment of admission; but its delivery is imperatively required within twenty-four hours subsequently.

Not later than one day after the patient's reception into an asylum, the chief officer must notify every such admission—

1. To the provincial governor.
2. The King's procureur of the arrondissement.
3. The cantonal judge of the peace.
4. The burgomaster of the commune; and,
5. To the committee of in-

spection. Besides these necessary formalities, the same official authority should intimate to the Procureur of the arrondissement, where the patient previously resided, the individual's admission ; so that, through the local officers, he may inform the relatives or friends of that circumstance. A similar procedure being also adopted in cases of sequestration.

No lunatic can be sequestered in his own domicile, neither in the house of a relative, nor of any person who may occupy that responsible position, unless the mental condition of such insane patient be certified by two medical practitioners, legally qualified. One being appointed by the party's family, or the persons most interested, the other by a cantonal judge of the peace, who must satisfy himself, through personal examination, respecting the lunatic's actual condition. Besides which, he is required to renew his visits at least every three months. Independent of these periodical inspections, that magistrate ought further to receive, every quarter, a fresh certificate from the family physician, reporting the patient's state, during the whole term of sequestration. Moreover, he may also order at any time another practitioner to visit the lunatic, whenever that proceeding seems necessary, or is considered expedient.

Every lunatic establishment, or temporary asylum, is visited by official persons specially delegated by Government for that purpose ; or by the permanent committees of inspection appointed to carry into effect the recent regulations respecting lunacy. Each asylum, and the patients they contain, must be inspected at least once, as follows :—1. Every half-year by the Burgomaster of the commune. 2. Every three months by the Procureur of the arrondissement ; and 3. Annually by the provincial Governor, or by one member of the permanent deputation of the provincial council, named by the governor. Temporary asylums, or provincial dépôts for lunatics, are also inspected once every three months, by the Burgomaster of the commune in which it is situated, and by the cantonal judge of the peace, besides the official persons previously specified.

By existing regulations, when the aggregate inmates of each sex do not exceed fifty, there need be only two divisions of patients—viz., tranquil and agitated lunatics. Should the number of the same sex amount to more than fifty, there must then be four sections at least—namely, tranquil ; agitated, and furious ; idiots, including dirty patients ; and, fourth, convalescents.

Whenever either sex comprise more than one hundred patients, then all clean and tranquil inmates must be placed separately from the dirty ; whilst the idiots should constitute two distinct categories. For every ten patients, one seclusion cell is deemed indispensable, unless under particular circumstances ; whilst

private patients ought always to be kept apart from pauper inmates. Lastly, neither class must ever be mixed with boarders, not insane.

Each asylum should have a medical officer; and where two or more are attached, one is denominated the chief physician. If the house contains beyond one hundred patients, there ought to be an assistant physician, or one medical pupil, resident within the institution, or in its vicinity; by either of whom, all the patients should be visited daily. The medical staff, their emoluments, and attributes, are submitted every three years, during the month of November, to the permanent committee of the provincial council for consideration and approval; who may also make whatever changes they deem requisite. When the director of an asylum, whether public or private, undertakes to support the inmates, as also to superintend such an establishment, he must first obtain a special authority from the permanent deputation. Again, for every ten patients, there ought to be one attendant. Lastly, no person can erect a new asylum without the sanction of Government, or even make important changes in an old establishment, unless under a similar authority; and then only after plans of the proposed alterations have been forwarded for examination and approval.

With reference to medical certificates required, prior to the admission of patients into an asylum, it is expressly enacted that the parties signing such documents shall specify when the disease commenced, its nature, duration, and essential characteristic symptoms; whether the patient had undergone any previous treatment, and, generally, every other circumstance with which the medical officer should be made cognizant. In addition to this report, the certifying practitioner is expected to forward a sealed communication indicating the cause, known or presumed, of the inmate's malady, and if any relative has ever been affected with mental disease. When these certificates refer to indigent persons, they must be granted gratuitously, by the medical officers of the poor belonging to the particular locality, where such insane patients may reside, even casually.

Numerous other points, besides those now mentioned, are also specifically alluded to, in the legislative enactments just quoted; but, being of secondary importance, the subject need not be pursued further. My object, at present, being only to speak generally of the system which prevails in Belgium with reference to lunatics, and the organization of asylums, not certainly to tire readers by any lengthened legal disquisition; believing that proceeding would seem both misplaced and supererogatory to the chief purpose proposed for discussion in this communication.

Nevertheless, before adverting particularly to the institutions

recently visited, it is important as a preliminary to remark that the special inspection of every lunatic asylum—whether provisional or permanent, as also temporary depôts for the insane, during their transference from one district to another—is confided in each arrondissement to a committee, consisting of five, seven, or nine members, including the district Commissary, who sits officially. All are nominated by the King, while the half is renewed every two years; but retiring members may be re-appointed immediately. These Committees select their own secretary, the Commissary being always chairman, and having a casting vote in cases of equality. That officer alone summons the committee, names the hour, their place of meeting, and, in case he cannot attend himself, appoints a substitute to preside. In short, the above government official is the moving power of this local board of inspection. It corresponds directly with the Minister of Justice at Brussels; and the united committee is required to visit, at least once yearly, every lunatic asylum situated within their own particular jurisdiction. Besides these annual visits of the entire local committee, individual members must arrange a rota amongst themselves, so that each insane establishment shall be officially inspected, not seldom more than every two months. Such inspections must not be mere formalities, as they embrace many important questions of inquiry and examination, which are specifically enumerated in the new code of lunacy regulations already quoted.

Finally, but independent of these local committees of examination, and in conformity with the Legislative Act, dated 18th June, 1850, a general commission has been instituted, whose duty is to inspect every asylum in Belgium, and report respecting their actual condition. These Commissioners are appointed by royal decree, and receive instructions from the Minister of Justice, to whom each are responsible; their salaries and all expenses incurred being included in the budget of that department. The present commission comprises three members—viz., M. Ed. Ducpetiaux, also Inspector of prisons; Dr. Joseph Guislain, well known throughout Europe for his great reputation; and M. D. Sauveur, also medical Inspector at the Home Office; with M. N. Oudant, as secretary. In addition to visiting officially asylums, and taking special cognizance of everything connected with lunacy, it is also one of the chief functions of these gentlemen to present, annually, a detailed statement regarding the insane establishments placed under their surveillance, which is first communicated to the Legislative Chambers by the Minister of Justice, and afterwards printed. The last Report issued is that for 1855, which amply merits perusal, as an able and instructive public document.

According to that ministerial paper, the total number of receptacles for lunatics, whether public or private, amounted to fifty-one last December. Of these, seventeen were appropriated to patients of both sexes; fifteen to male, and nineteen to female inmates, exclusively. Again, thirty-two of the above admitted both pauper and private patients; five only indigents; and fourteen received none but members of the middle, or those belonging to the upper classes of society.

Many of the above enumerated institutions are of limited extent: since only eight contain from 100 to 150 inmates; whilst the population of not more than six actually exceed 200 patients. The largest establishment at present is St. Julien, in Bruges—if the insane colony of Gheel be excluded; which latter locality cannot be classified comparatively,—seeing, the lunatics congregated in that district are distributed both in numerous private houses of the town, and amongst neighbouring villages, as I shall more particularly notice in the subsequent part of this communication.

Speaking generally, Belgium does not possess asylums placed upon the same footing as in France, and in many other European countries—where the direction, and also the management, are confided to agents appointed and paid by Government. In this part of the Continent, the institutions for lunatics, at present open, belong either to hospitals, private individuals, or religious associations; who administer them at their own risk and expense. These peculiar circumstances have created difficulties in carrying out some of the Commissioners' late recommendations, made with a view to improvements; and may in part explain why several old institutions still remain nearly in the same "*deplorable condition*" they exhibited, when the Commissioners, about three years ago, made their first official inspection, after being appointed by Government.

Throughout Belgium, whose present population verges on 4,520,000 inhabitants, there were very recently 4907 recognised lunatics,—which hence gives a ratio of one insane patient to every 920 persons; the proportion being, however, greatest in urban, and least in rural communes. The latest statistical calculation made, with reference to this point, shows that in most towns, the amount reached to one lunatic for every 470 residents; whereas, only one insane person was found amongst so many as 1368 inhabitants of rural districts. In regard to sex, the males preponderated; their number being 2630—whilst only 2277 were females: thus giving a difference of 15·50 per cent., or nearly one-seventh more male than female lunatics. This fact is interesting, since it proves, notwithstanding the greater tendency considered to prevail, in most countries, of females to mental diseases, in

Belgium, generally, the predisposition seems strongest amongst the male part of its population. Of the 4,907 lunatics above enumerated, 1,220 were classed as private patients, or pensioners; the rest being indigents. About one-third were deemed curable cases; the remainder comprised incurables.

By way of giving an outline of the general movement which characterized the insane population under treatment, during one year, in all the asylums of Belgium, that of 1854 may be quoted as instructive. During the period above named, 1309 new patients are reported to have been then admitted, of whom 402 were discharged cured, being exactly 30 per cent. on the admissions; whilst 421 died; which, therefore, makes the mortality amount to more than 32 per cent., and greater than the actual recoveries, when similarly calculated. This result cannot be reckoned as by any means satisfactory, and it also becomes certainly difficult of explanation. Amongst the 1309 new patients received into the different establishments, 1142 were cases who had never been previously insane, whilst 167 were reported relapses; thus making nearly one-eighth of the entire number.

Although impartial observers acknowledge that numerous ameliorations still require to be accomplished, in various Belgian institutions for the insane,—both private and public,—it is not the less true, many important and useful improvements have been effected since the permanent commission of inspection was first appointed. These public authorities state in their last Report, amongst other facts which are gratifying, that “Thanks to the changes made in the insane establishment of the Cellite Frères at Antwerp; the hospice at Duffel; the asylum for males in Louvain; that of Menin; St. Nicolas, in East Flanders; Strop, near Ghent; as also the institution of Uccle and Evere, in the environs of Brussels, the number of inmates have increased in a proportion more or less remarkable. On the contrary, those receptacles for lunatics which do not yet supply all desirable guarantees of their good condition, will be inevitably abandoned.” The parties here alluded to must soon comprehend their real interest; so that, in accordance with the dictates of humanity, beside future material prosperity, they will be compelled to introduce those reforms the new laws prescribe, and which are likewise imperatively required for the physical comfort of many afflicted inmates, now confined in several unlicensed establishments.

Unlike most other European capitals, Brussels possesses no public asylum for the permanent reception of lunatics; there being only a small provisional dépôt attached to the civil hospital of St. John, which is more like a prison than an insane receptacle, and where mad patients are temporarily confined, previous to their transference to other establishments; generally to Gheel or

Bruges. When I visited this temporary domicile, it contained only ten inmates; some of whom had been merely placed within its precincts, prior to removal elsewhere. Indeed, only a few days afterwards, I recognised two of these identical patients at the provisional infirmary of Gheel, where they had been sent, preparatory to being placed with some authorized resident in that commune.

Indubitably, ample accommodation may be found, for insane members of the middle and upper classes, in the private "*maisons de santé*," near Brussels. For instance, in that of M. Denaeyer-Dupont, at Evere, containing, on an average, fifty-six inmates; or at the larger institution belonging to M. Vanderkindere, having upwards of eighty patients, which occupies an elevated, salubrious position, not far from the capital. Here, the general aspect, means of treating insane patients, and also various modern appliances, seemed very satisfactory when I visited the establishment. Again, should parties feel desirous of sending their relatives to new scenes or more distant localities, then, the excellent "*maison de santé*," at Ans et Glain, near Liège, the property of M. Abry, and whose son-in-law is the resident physician, may be selected. The latter institution now specified occupies an admirable position, possesses an extensive yet beautiful prospect over the neighbouring city, as also the fertile valley of the Meuse; and having personally examined this precinct and buildings—then containing sixty-five patients—I can speak favourably of its several capabilities. Notwithstanding such varied means for treating demented persons—not victims of poverty in addition to their mental diseases—still, the absolute want of a large public asylum for indigent lunatics, in such a populous locality as the metropolitan district, is remarkable; particularly when readers remember that in the arrondissement of Brussels, containing a population of about 415,000, there are nearly 600 insane persons reputed natives, most of whom now occupy asylums in other provinces. So great a desideratum requires some speedy remedy, for the sake of humanity, altogether irrespective of other equally potent considerations.

Although the superior Administrative Board of existing Brussels Charitable Institutions have not yet come to any determination respecting this deficient accommodation for lunatics within their own jurisdiction, that question has not been overlooked. Indeed, various members of Council, the Inspectors of lunatics, and also the Provincial Governor, it is said, seem fully impressed with the great importance of constructing an asylum of the first rank, for receiving indigent patients, which shall in future obviate any necessity of sending their insane poor elsewhere. The case is urgent; and however great might be the preliminary expense

which such an establishment must entail upon the Brussels hospital administration, it ultimately would prove most beneficial, and relieve the city from all opprobrium of being now obliged to solicit admission for their necessitous insane patients into the asylums of other districts. This deficiency ought to be supplied, whereby the metropolitan province of Brabant shall no longer remain without having a public asylum, supplying adequate accommodation for the insane poor born on its soil; and who, therefore, possess the strongest claims to participate in the benefits which such an establishment would disseminate.

Considering the limited extent of Belgium, the aggregate asylums for the insane it contains are much more numerous than in almost any other European country. The institutions are, however, generally of small size; nay, many have only from ten to thirty inmates. The largest numbers are located in East and West Flanders; the chief places being Ghent and Bruges, or in the immediate vicinity of these towns. Of course, this remark does not apply to the insane colony of Gheel, which is situated in the eastern part of the province of Antwerp, not far from its frontier towards the Rhine, and contains more lunatic patients than any other district; but the inmates are there very differently placed, being lodged with cottagers, peasants, and others—not congregated together in a confined public asylum.

The above facts, and recent investigations respecting the number of lunatics under treatment in different insane establishments, besides those which still remain with relatives, prove that mental diseases are by no means of unfrequent occurrence throughout Belgium; and, if compared with neighbouring kingdoms, they appear even more numerous. The ratio, as already stated, amounts to one lunatic in every 920 inhabitants; which, therefore, constitutes a higher proportion than in France, Germany, or England. The causes of this marked frequency of insanity amongst Belgians, not being one of the objects proposed in these notes, I consequently only allude to the question, from considering it of much interest, and deserving farther discussion. Nevertheless, hereditary tendency to mental disease, the prevalence of scrofula amongst the lower classes, their poor innutritious diet, frequently more vegetable than animal, weakened physical frames—too often caused by hard work, and privations in the labouring population—with the mixed or mongrel races which seem to characterize many natives of this country, must exert considerable influence, unquestionably. These peculiar features certainly attracted my special observation, when recently travelling through Belgium. In its large prisons—many of which were inspected, in mendicity, or poor-houses, lunatic asylums, the churches—where crowded congregations then often assembled,—

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at railway stations, and in market-places this occurred. Indeed, wherever numerous bodies of spectators got collected together, even casual observers could not avoid noticing the diversity of race, and outward physical aspect, which the populace around then supplied for ethnological meditation. The dark hair and swarthy features of Spain; the blue eyes, light auburn locks, and true Saxon countenances; the complexion, gait, and manner of genuine natives of France; and, lastly, the more staid, phlegmatic mental and bodily characteristics of Dutchmen, might be everywhere easily distinguished. In short, throughout no country of Europe, which I have ever visited, was the same difference of peoples so peculiarly observable, as seemed to prevail in the places under discussion.

Before describing the several public asylums which form the subject of subsequent remarks, it may be premised, with reference generally to Belgian establishments for the insane that, amongst the fifty-one asylums now open, three-fourths are situated in towns, or their immediate environs; while only about one-fourth occupy rural communes. From this cause, their precincts are often of very limited extent; and, consequently, such institutions become badly adapted for the treatment of lunatics. This remark particularly applies to Ghent, and likewise to Bruges; although to the latter city, less strongly. However, as in these districts the largest public asylums are situated, they therefore will form the chief subject of future observations. To notice small establishments, which contain very few inmates, would prove superfluous; consequently, I will at once proceed to describe the two rather extensive institutions for lunatics, located in the ancient and once powerful capital of West Flanders—namely, Bruges.

Preliminary, however, to commencing that undertaking, it seems desirable to give some outline of the features which most Belgian asylums exhibited very recently, in order to contrast their former state with the present. No authority in reference to such matters can be considered so truly unexceptionable, and less liable to express exaggerated or unjust condemnation of the public asylums in Belgium, than a native of that kingdom; since his feelings would be naturally inclined to take an opposite direction. A more trustworthy and also impartial judge cannot therefore be found, or one better able to speak upon the subject with weight, than M. Guislain, who says, in his first lecture, "*Sur les Phrénopathies*," published 1852, "Lunatics in Belgium remain forgotten in sombre prisons. They resemble merchandize amongst speculators, who make them an object of infamous traffic, like animals from the farm-yard, fit only to be bought and sold, as horses or swine. Much talk has certainly taken place during the last thirty years; but so little has yet been accomplished that our afflicted maniacs have been only turned round in a vicious

circle of selfish and fatal administrative influences." To show that asylums are now improved, I commence with those at

BRUGES.

In this formerly opulent city, and, several centuries ago, a great emporium of trade, with upwards of 150,000 inhabitants—but now reduced to less than one-third of that number, whilst its commerce is almost annihilated—there are at present two extensive institutions for treating lunatics—namely, St. Julien, and St. Dominick. Having visited both asylums early last September, I therefore propose giving a brief account of the inspection then undertaken.

1. *St. Julien Asylum*.—This institution is one of the most ancient establishments for receiving lunatics, throughout Belgium. It is situated in a wide, airy street, near the railway station, close to the Porta Santa—one of the gates of Bruges—and closely adjoining its ramparts. Being originally a convent, the buildings are old, and some appeared not well adapted for their present purpose. Still, considerable improvements in the interior arrangements having been since effected, it is much resorted to by patients of both sexes. According to tradition, this locality formed a hostelry for pilgrims, so early as the seventh century; but it was not till about A.D. 1500, that insane persons were received within its precincts for protection and treatment. Attached to the present lunatic institution of St. Julien, and under the same superintendence, two other—although much smaller—establishments, are also opened for the treatment of persons afflicted with mental disease. One is that of St. Anne, situated in a healthy and agreeable district near Courtray; the other being the Convent of Cortenbergh, lying between Brussels and Louvain, in a very picturesque locality, celebrated for salubrity. This house has been recently rebuilt, according to the approved principles of modern architecture; but, being intended solely for the accommodation of female patients of the upper and middle classes, the number received is therefore very limited. Having thus three separate establishments—all under the same superior direction—the relatives of private patients may therefore secure, if considered advisable, a change of residence, so that those who wish can then pass the winter in town, and summer in the country.

When I visited St. Julien—early last September, the total population of the chief institution, situated in Bruges, amounted to 310 lunatics; of whom 166 were male and 144 female inmates. Of these, half were tranquil patients, seventy-five agitated, thirty-eight epileptics, thirty idiots, and twelve were then considered convalescents. Amongst the whole, thirty were classified

as dirty persons ; the sexes being nearly equal, in reference to that particular feature. No female lunatic appeared in camisole, or undergoing any kind of bodily restraint whatever. However, one male patient was temporarily confined by a strait-waistcoat, whilst two men and one woman were in seclusion cells; all three being much agitated and very violent. The general population seemed tranquil, considering the number of inmates congregated in different divisions. Many females occupied themselves in lace-making, domestic employments, and in preparing or mending clothes for residents. A large number of male patients were engaged in agricultural work on the adjoining farm, which amounts to twenty acres, belonging to this institution ; as likewise in the garden attached to the building for private male pensioners. These pay a larger sum for board than the indigent residents, and varies from 500 to 2500 francs annually ; whereas, the allowance received from communes, for pauper patients, amounts to only 75 centimes per diem—that is, 273 francs, or 11*l.* annually ; which truly seems a very low remuneration for such inmates—feeding, lodging, and clothing included.

Being in most parts an ancient structure, this asylum is not conveniently arranged. The apartments are too crowded in several instances, and its buildings being sometimes very close together, there seemed not sufficient separation of several wards occupied by the different sexes. Nevertheless, much has been done to remedy existing defects ; and considerable improvements are also in contemplation. The patients' court-yards are four in number, some being, however, rather limited ; and there are, besides, three small gardens for inmates taking open-air exercise, with another of greater magnitude for pensioners, whose number amounted to forty-eight, comprising twenty-two females, and twenty-six male lunatics. Of these, several were, I understood, natives of Great Britain. Indeed, one was pointed out who had only recently arrived from the north of England.

Two physicians and one surgeon are attached to the St. Julien Asylum, one of whom pays daily visits, or oftener, if necessary ; but there is no resident medical officer. The chief authority and director is M. le Canon Maes, who has a lease of his present premises from the Mendicity Dépôt of Bruges. That reverend gentleman may be therefore considered the proprietor. He is principal manager, takes all pecuniary risk upon himself, and must be at whatever expenses either improvements or alterations may entail. Those now essential are certainly considerable, in order to meet the requirements of constituted public authorities ; and, consequently, to render the interior more in unison with the present ideas entertained, regarding what seems proper treatment for lunatics.

Having been only provisionally licensed until the 1st of last April, on condition that various important changes, admitted by impartial parties as urgently required, were effected in its internal arrangements, this institution remains at present without legal sanction; and will continue, till the Committee of Inspection's suggestions are completed. Different propositions were made to arrive at a satisfactory solution, but, hitherto, every effort has proved unsuccessful. As the Communal Council of Bruges have not yet sanctioned any of the plans proposed, and as the administrators of hospital property, the Inspectors of lunatics, besides the parties interested pecuniarily in this establishment, all entertain very different opinions with reference to the questions in dispute, some time may yet elapse ere matters shall be arranged satisfactorily. This dilemma is much to be regretted, since the hospital of St. Julien has long been known as a useful institution; and if properly reorganized, whilst various admitted defects were removed, it would doubtless confer most useful benefits upon those unfortunate persons, for whose individual advantage it is destined. The anomalous position, in which this institution is now placed, forms the subject of a special notice in the Committee of Inspection's last Report, who think it cannot much longer exist as at present. The ameliorations demanded must be carried out efficiently, or the establishment will be shut up and suppressed.

During the past year fifty-two new patients were admitted, thirty-two being male, and twenty female lunatics; twenty-seven left the asylum cured, of whom nine were male and eighteen female inmates, and thirty-three died; the male patients in that category being twenty-one in number, with only twelve females. These figures hence show that insanity oftener affected male persons applying for relief at this institution, and fewer were discharged cured; whilst the proportion of deaths ranged higher amongst that sex, than those recorded in female patients. Such results, however, become less remarkable when it is known that two-thirds of the inmates were classed as incurable lunatics; and in about one-third only was a slight hope entertained of ever doing much good, still less gave any prospect of recovery. In fact, the mental diseases of many being of long standing, their favourable termination consequently appeared utterly hopeless.

2. *St. Dominick Asylum*.—This institution—like the former, also an ancient convent—is situated in one of the streets of Bruges, and has been now appropriated for the treatment of insane patients upwards of half a century. Since 1846, the asylum has received considerable augmentations, in reference to accommodation; and, at the same time, various ameliorations have been effected in its interior arrangements. Nevertheless, from

the buildings being defective—some of which appeared rather ancient—and although several new constructions have been recently erected, this establishment is not considered well adapted as a residence for private patients. Hence, the proprietors, who are five in number, have lately leased a château named “St. Michel,” with a garden and farm of about 100 acres attached. This “*maison de santé*” is nearly two miles from Bruges, on the Courtray road, and had, when I visited it, twenty-nine male pensioners, as also twenty convalescent patients of the indigent class, sent from the town establishment to labour in the fields; which work often materially promotes their ultimate recovery. The central asylum likewise receives, according to an arrangement with the Department of Justice, lunatics accused of crimes, and those who have been convicted by ordinary courts of law, or sent from various prisons. This criminal category forms a separate section, and quite distinct from other inmates; whilst such parties are placed in courts or cells specially constructed, to prevent escape.

When I inspected St. Dominick, the population comprised 330 persons, consisting of 182 male, and 148 female lunatics; amongst the latter sex eighteen being pensioner patients, belonging to the upper and middle classes. Besides these numbers, twenty-nine insane men, paying from 500 up to 3000 francs annually, with twenty indigent lunatics, occupied in agricultural labour, as previously stated, were then lodged at St. Michel's; so that the total inmates of the united establishments under discussion, amounted to 379 individuals. -In the town department, the patients are divided into five categories; viz., 1st, convalescent; 2nd, tranquil lunatics; 3rd, agitated; 4th, turbulent; and 5th, idiots, with dirty inmates. The same classification being adopted in both sexes throughout.

Again, in reference to the nature of their mental maladies, according to information supplied to my inquiries, it appears twenty-one were epileptics, ten being males and ten females; twenty-eight men and twenty-six women were classed as dirty patients; thirty males and twenty-eight females as agitated; whilst only two male and one female inmates were said to be paralytic. The remainder being all reported tranquil lunatics; a large proportion of whom consisted, as elsewhere, of chronic cases, and considered incurable. The buildings comprised twelve court-yards, six being appropriated for male, and six for female residents; the agitated, and those requiring more surveillance than the rest, occupying very properly the central portion.

Some dormitories contained forty beds, others only fifteen, but all appeared clean, and also comfortable: particularly, when it is remembered the inmates were chiefly of the pauper class. The sleeping chambers for dirty patients were uniformly

single-bedded, well ventilated, entirely free from any offensive odour, and seemed really much better than I have occasionally observed in other countries, for that class of lunatics. The general aspect of the asylum appeared most satisfactory : both male and female residents being also neatly and properly clothed ; whilst the physical health of all was reported particularly good. No female amongst the entire population being sick or in bed ; and only one male invalid, slightly indisposed from bodily disease, occupied the infirmary, along with a soldier, almost convalescent from an attack of intermittent fever he had caught when in garrison at Newport ; where that malady proved, as usual, very prevalent during the recent summer, and of which he had become the victim, besides labouring under severe mental disease. Five female patients were confined in camisoles—but free, and walking about in the agitated court-yard ; another being in temporary seclusion. No male lunatic was in any way physically restrained, although two excited maniacs occupied seclusion cells, having become very excited and violent. However, this proceeding would not likely be of long continuance, and merely till they got more tranquil. If not entirely abolished, restraint is now as little employed as possible ; the general opinions respecting camisoles, and their utility, being much the same in this country as in France. Further, in the cases now mentioned, the strait-waiscoat was not tightly, but loosely put on : a great object being, apparently, to prevent the patient from injuring either others or themselves ; and chiefly to confine such parties' hands, so as thus to disable them from tearing their clothes, or so forth. Notwithstanding the number of agitated patients, the appearance of the entire population seemed that of quietude. The females everywhere were certainly more noisy and talkative, than the male inmates. But comparing this establishment with analogous collections of insane residents throughout France, there prevailed much less violence and excitement than I have often observed in that country, when visiting similar institutions.

Occupying and amusing the lunatics always constitute a principal object in the treatment pursued. Many male patients are consequently employed as tailors, weavers, spinners, and in other employments ; besides numbers also in the gardens, or at agricultural labour. One interesting and peculiar feature deserves however special notice—namely, the numerous former patients who have now become assistants, or “aides infirmiers,” in the different wards : of whom, not less than thirty male lunatics of this description are so inscribed, according to a recent statement. Amongst female patients, the same system is pursued ; hence, not less than sixteen were also registered as assistants, on their own side of the institution.

Numbers were likewise engaged in the laundry, knitting stockings, making clothes, for other patients, as also in the kitchen; whilst all the bread consumed in this large establishment being made on the premises, the bakehouse therefore forms no inconsiderable means of employment to inmates. According to present opinions entertained by the executive authorities of this asylum, physical labour, as a means of distraction, exercises often most beneficial influences upon the mental condition of lunatics; consequently, it is always very zealously promoted. Nevertheless, no person is ever forced to labour, either through moral or physical restraint; that object being always attempted by the aid of example, or the desire of gain in those who are induced to work, and by granting small favours, with additional indulgences to the most industrious. Amusements and recreations are likewise assiduously promoted. Card-playing, draughts, dominoes, billiards, and gymnastics being very often resorted to as favourite sources of enjoyment.

The medical staff of this asylum consists of a chief physician, Dr. Van Hecke—well known as an experienced practitioner, resident in Bruges,—with two assistant physicians, and one consulting surgeon; while the lay officials comprise a director and secretary, besides an almoner. By way of conveying some definite idea of the number of persons employed, and hence actually required in managing such an extensive establishment as that of St. Dominick—containing always upwards of 300 lunatic inmates—it may be interesting to mention that, on the male side, besides the chief overseer, there are constantly twelve attendants, of whom nine superintend the workshops and garden, with six assistants, and six sub-assistants; irrespective of various convalescent patients, who also give their services in different departments. On the female side, in addition to the lady-superior, who overlooks all the others, there are thirteen religious sisters of the order of St. Dominick. These superintend the different wards, one in each, as also the clothing department, the kitchen, the laundry, the work-rooms, and dining-hall. The above sisters have, besides four head domestics, an unlimited number of female servants, taken from convalescent patients, upon a similar plan to that pursued in the male department. Not being permitted, by superior authority, to have "*sœurs and frères religieux*" in the same institution, all the attendants on indigent male patients consist of laymen. However, at the succursal asylum of St. Michel, where only male inmates are admitted, six religious brothers, with four lay-domestics, placed under the superintendence of a clergyman, manage the establishment; whilst a physician—Dr. Beckman—living in the neighbourhood, takes charge of all medical treatment and professional surveillance.

In order to obtain well qualified lay-attendants, and in sufficient number, when convalescent patients exhibit an aptitude, or express any wish to become regular domestics in this asylum, rather than leave, such parties are first placed on the list of candidates; when they obtain a particular dress, assigned by way of distinction. After fully proving their fitness for office, and so soon as a vacancy occurs, they are then installed as effective attendants. The above system has hitherto answered admirably; most of the present male servants employed at St. Dominick having been formerly patients. It is hence specially mentioned as worthy of trial, and if approved, for adoption elsewhere; since nothing is confessedly more difficult than to obtain good attendants on the insane; whereas, the result here has proved quite otherwise.

One feature at this institution also deserves special mention,—namely, the excellent medical register at present kept of all cases admitted. Such proceeding, certainly, is only in accordance with the recent law; but as similar documents seemed not invariably forthcoming elsewhere, and, I fear, do not always even exist in the form required, more credit is therefore due to Dr. Van Hecke, for the manner in which these valuable memoranda are officially preserved. I looked over several, and found records of symptoms, and treatment; besides *post-mortem* reports, which were most interesting. This repertorium of facts is already large: and doubtless will every year become more valuable to the practical physician, as likewise to zealous psychological pathologists.

Although not of much apparent significance, nevertheless, as it shows the great attention paid, even to minute matters of detail, a very recent improvement, or rather an important addition, which has been made to the male wards of St. Dominick, deserves being specially mentioned. *Spittoons are now placed in such apartments*, particularly those occupied by dirty patients. In this country, where almost every man and boy, nay, even women, seem slaves to that degrading, filthy custom, and health-destroying—both of body and mind—abomination, *Tobacco-smoking*, these appendages become absolutely essential throughout any inhabited dwelling, whether for sane people or maniacs. Therefore, irrespective of sanatory considerations, as most lunatics, by thus placing such salivary recipients within easy reach, may be taught to use them, instead of soiling floors or walls with their offensive spittings, internal discipline thereby becomes materially promoted. I am no advocate of smoking; on the contrary, would strongly condemn such an unseemly habit—or vice, more correctly speaking—from believing it proves both injurious to the mental faculties, and inimical to the physical powers of many votaries. Nevertheless, if mankind will obstinately use this deleterious weed, assuredly the most excusable proselytes are lunatics.

Therefore, spittoons ought always to be placed in every similar institution where smoking is permitted.

During the past year, 100 new patients were admitted into both establishments; sixty-one being male, and thirty-nine female lunatics. The total cures amounted to forty-four cases, of whom thirty-three were male, and eleven female inmates; while thirty-six deaths were recorded, twenty-three being of male, and thirteen female residents. It thus appears that the ratio of recoveries was forty-four, and the deaths thirty-six per cent.; when both results be calculated, according to actual admissions. More fatal cases occurred during June, October, and February, than throughout any other months of last year; whereas, the fewest happened in May, August, and December. The total number of persons who passed through the infirmary in the course of twelve months, from being attacked by bodily disease, was seventy-nine, of whom thirty-six died, as already stated, and thirty-eight recovered; thereby leaving five patients inmates of that department on the 1st of January; thus showing that physical disease prevailed here much more frequently throughout the former, than during the present season.

Having stated in a previous paragraph that the strait-waistcoat and personal restraint are not yet entirely laid aside at the St. Dominick Asylum, it may be now mentioned as instructive, and also further to illustrate the above important question, bearing upon the treatment of lunatics, that in this institution, where usually about fourteen to every 100 inmates appear agitated patients, the cases are but rare for which the medical officer feels obliged to institute coercive measures; seeing, cellular isolation generally proves sufficient. When bodily restraint is actually used, the camisole, or leathern bracelet, are the only means employed; and then chiefly in suicidal persons, and excited erotomaniacs. With reference to the application of physical coercion, such as those just mentioned, it was reported by Dr. Van Hecke, that amongst 377 lunatics under treatment, during the entire year, eighteen male and twenty-four female patients were subjected to cellular repression; which, therefore, represents a totality of fifty-four days. Further, eight men and ten women were confined by strait-waistcoats; whilst twelve male and sixteen female lunatics temporarily wore leathern bracelets. Lastly, eleven patients had been put in camisole, during two to four days consecutively, besides seven others for a much longer period. These authentic and official reports, showing the actual employment of personal restraint at this asylum, would be considered excessive in England, or altogether unnecessary, if not reprehensible. Still, it should be remembered that, throughout various continental countries, the application of camisoles, in furious or

dangerous maniacs, becomes not only justified by several conscientious and experienced practitioners, but then even strongly defended from being, according to their opinion, both beneficial in repressive results under the above circumstances, and likewise proves often humane in its judicious application.

GHEENT.

Another district where numerous lunatics are at present congregated, in different asylums, is the ancient city whose name has been given above. Within this populous locality—now designated the modern Manchester of Belgium—having upwards of 100,000 inhabitants, but formerly nearly double that amount, and deserving special notice by travellers on account of its historical reminiscences, valuable pictures, and venerable buildings, there are, besides two large public establishments for lunatics of each sex, the Hospice of “St. Jean de Dieu”—although actually of very limited extent; next, two small asylums attached to the great and little Béguinage; then, the “Maison de Santé” for females in Rue d’Assaut; and, lastly, that known as the “Strop,” which is situated on a rising ground, not very far from one of the gates of Ghent, but where only male patients belonging to the middle and upper classes are received. These seven establishments generally contain about 630 insane residents, upon an average; the majority being female lunatics.

Before advertg to different institutions in Ghent, besides the fact that, a greater number of female compared with male lunatics are enumerated, it is important to add as an authentic observation that, mental diseases seem exceedingly common amongst its general population. Thus, M. Guislain says, there is one lunatic to every 302 inhabitants, which constitutes, therefore, an enormous proportion; indeed, much greater than in either Germany, France, or England, and altogether unique. Without attempting now to explain this remarkable circumstance, however singular it appears, I at once proceed to consider—

1. *The Asylum for Males.*—This public institution is situated almost in the centre of Ghent, having a sluggish canal on one side, and adjoining a broad street of considerable traffic on the other. It is quite close to the “Hôtel de Flandre,” where I happened to take up my quarters. As the principal entrance can be only approached by a narrow lane, visitors may hence easily pass its antique gateway unobserved; which actually happened to myself, when first endeavouring to find the venerable-looking portal whereby I gained admittance. The building now appropriated for receiving male indigent lunatics was an ancient Alexien convent, constructed some centuries ago. This seems proved by its very old chapel, where the insane residents still assemble for

divine worship, and which really deserves inspection by antiquarians, or any curious archæological amateur.

This entire property belongs to the city: and in everything appertaining to its administration, is represented by a Commission of the Civil Hospitals. Having been condemned by competent authorities, and likewise by public opinion, as wholly unfit for the reception of lunatics, any opinion in reference to many defects seems, therefore, supererogatory. However, I would only further remark, after quoting an observation of one of its own able officers, who says in a recent publication, "The whole structure offers an accumulation of arrangements the most deplorable," that whenever the truly magnificent institution for male patients, now erecting near the Bruges gate, in one of the city faubourgs, is completed, this antiquated building will be closed as a lunatic asylum, and appropriated for other purposes; one of which, report states, being a barrack for lodging the local fire brigade. But happen what may, the sooner every insane resident now confined within the precincts of this venerable convent gets removed to the new asylum, so much the better; as, then, all sombre recollections of this melancholy abode will at least have become matters of history, if they be not forgotten, by the present generation.

Being only kept open as an asylum until the new institution is ready to receive its present inmates, to make any remarks regarding the accommodation now supplied appears out of place and superfluous; therefore, without adverting to such questions, I would observe that, at the period of my visit to this receptacle, the total insane male lunatics amounted to 260; amongst whom 30 were epileptics, 21 agitated, and 16 dirty patients. All were indigents, excepting 45, who paid a moderate board; but even these did not, however, belong to the superior classes of society; every inmate of that category being now placed at the "*Maison de Santé*" of Strop, which is, although separate, still under the same management. The general health of residents was reported, on the whole, as satisfactory. Not more than twelve patients were sick in bed, whose physical diseases seemed of a mild description, and none suffered from any serious malady. One lunatic was in camisole, while another wore leather gloves, to prevent him tearing his own clothes. These were the only persons under bodily restraint; hence, speaking generally, the whole establishment exhibited a tranquil aspect, including the quarter appropriated to agitated and furious patients.

Respecting the causes of insanity in patients recently admitted, moral influences were reported the most frequent. Drunkenness being likewise often assigned. Dissipation, with misconduct, produced madness in several instances; and lastly, hereditary predisposition seemed to have existed in about one-third the

total admissions. This transmissibility of mental diseases was, however, proved to prevail, in a greater ratio, from father to son, than from mother to her male offspring; thereby showing that, here as elsewhere, insanity oftener descended through the same sex than the opposite. Indeed, it was confidently said, grand-fathers more likely transmit mental complaints than the grandmother to descendants.

In one of the court-yards visited, about twenty idiot boys were assembled, who seemed, on our entering, going through military evolutions, under the directions of a fogle-man. This occupation was encouraged both for physical exercise, as also to endeavour, if possible, to excite their mental faculties by making them keep the step when marching, and further to awaken attention, during various bodily manœuvres. Afterwards, the poor little fellows cheerfully sung a hymn, then performed some gymnastic exercises: and, notwithstanding the darkened state of their intellects, besides being confined in this small area, which constituted almost the sole outer world they knew, they appeared healthy, looked contented, and even happy, in spite of many mental, as likewise material, privations.

Another commendable feature should likewise be here mentioned—namely, that music, both vocal and instrumental, is much cultivated in this abode of affliction. The reverend almoner zealously promotes such sources of gratification, in which he is greatly aided by the assistant physician; besides various *frères* belonging to the establishment, who are often performers. These musical réunions are, however, encouraged more as recreations than like any scholastic instruction. A worthy *frère* plays on the piano, another on a bass fiddle, the clarionet, and so forth, whilst others, and patients, join in chorus. The evening previous to my visit, one of these much-appreciated musical parties had assembled, whereof ample evidence appeared in the large hall, into which I was shown next morning, prior to visiting the various dormitories; since various musical instruments, and other appurtenances used, during the fête, were still remaining in that apartment.

During the past year, sixty-two new patients were admitted, nineteen discharged cured, and twenty-eight died: which results show that, the proportion of deaths was even more numerous than actual recoveries. Amongst the cases terminating fatally, fifteen were reported as labouring under dementia, six had general paralysis, four were examples of mania, and the remaining three died from less defined varieties of mental disease. With regard to seasons, in reference to admissions, cures, and deaths, according to the experience of past years, it appears that, more patients were usually admitted during warm weather; as, for instance, in the months of May, June, and July. The largest number of cures

being reported within six months after the patients' admission; whilst the deaths proved most numerous during the cold, or first months of each year. Again, respecting suicides, it may be mentioned as highly interesting that, from 1816 to 1852 inclusive, only eight cases of self-murder occurred among the whole male lunatics of this establishment. Such results may be partly explained by the fact that, great vigilance is constantly exercised, on the attendants' part, towards suspected suicidal patients, who are never left alone, but always associate with the other inmates. During day-time, that class of maniacs remain constantly under surveillance; and at night they sleep always in a dormitory surrounded by other lunatics, capable of watching over their conduct. Lastly, in the worst cases of that description, one religious brother belonging to this establishment occupies a bed adjoining the suspected individual, so as to notice every suspicious movement, and thus be ready for any emergency which may supervene.

The medical staff consists of one physician—the eminent M. Guislain—a consulting surgeon, and an assistant physician; but none of these officers reside on the premises. However, when the patients are removed to the new Asylum, a resident physician will be installed. The whole attendants are male persons; and consist of twenty-two religious brothers, four domestics, with four assistants: thus making, altogether, thirty individuals to superintend 260 lunatics—viz., one to every nine patients. Over these, a resident director presides, who is a clergyman, and takes the chief management. There is, besides, an almoner; the entire establishment being administered under the supreme direction of the City Hospital Commission. That body has constantly endeavoured, it is only just to observe on the present occasion, to do everything in their power to diminish the admitted insalubrity of this locality; and have, further, seldom been deterred from making any reasonable sacrifice to attain that result, or to promote the comfort of residents; whilst the zeal and talent of M. Guislain appear constantly exerted towards promoting other objects equally benevolent.

2. *Asylum for Females.*—The establishment which now comes under review is situated not far from the ancient Asylum for male patients just described. It lies in the same quarter of Ghent, being close to the street and canal already mentioned—having only intervening the large buildings, at present occupied as the College of Jesuits. According to an inscription still visible on a stone placed over the antiquated gateway, the year 1605 is stated to be the date of its foundation. The present structure was erected by the magistracy of Ghent, upon ground formerly constituting part of the ancient ramparts, but which now forms almost the centre of the modern city.

Being surrounded by streets, many private houses, besides public buildings, and having a large factory close to its very entrance—the noise of whose revolving machinery never ceases during day-time—the outward condition of this Asylum seems by no means favourable. In the interior, with reference to the actual number of its inmates, sufficient space appears wanting for the existing population. Hence, it is only through various ingenious combinations, carried forward by the constant zeal of managing authorities, that this institution has been made convenient, or able to contain comfortably its numerous residents under treatment. Like the establishment for males, it receives lunatics of the indigent classes belonging to Ghent; and likewise, by special permission, patients from other districts. The property belongs to the Civil Hospitals' Commission, and is managed under their administration. Although greatly superior to the male department in many attributes, nevertheless, impartial observers cannot but agree in the expressed opinion of several officials, that a time not distant must arrive, when some new locality will have to be chosen, and another structure erected, for the reception of indigent females; much of the same description as the building now in course of construction for pauper male lunatics. In the meantime, however, this institution continues to render important services to suffering humanity, being distinguished by the order, as also cleanliness everywhere prevalent, besides the care and attention exhibited towards patients. To carry out these important objects more effectually, the administration propose to add an adjoining house to the present accommodation; so that several further ameliorations may be accomplished, which cannot be now fully realized, in consequence of the limited space possessed, and from other existing inconveniences.

When perambulating the different dormitories, court-yards, and other appurtenances of this Asylum, although some appeared rather of a limited extent—owing to the nature of its ancient buildings, and confined interior precincts—the cleanliness, excellent ventilation, general tranquillity, and good order which prevailed throughout, were very gratifying to behold. Much attention appeared given to keep the various wards always thoroughly ventilated. This became the more necessary, although it was attended with greater difficulty in effecting, seeing apparatus had to be applied to an anciently constructed domicile like the present. M. Guislain has especially undertaken this very responsible task; and, judging from various effects already produced, by the machinery employed for that purpose, as likewise the absence of all unpleasant odours, when passing through different apartments at an early hour, visitors might conclude on such evidence that these hygienic operations have proved successful. Consequently,

critics may fairly say that one step in advance had been made towards solving the much disputed problem—Can efficient ventilation be ever really accomplished?

Throughout, the wards looked very clean, the inmates tranquil, well clothed, and apparently contented. In one apartment I saw about 120 patients at work, many being then engaged in lace-making, which seemed to me of much better quality, if not finer, than that made by ordinary sane persons. Indeed, report states, the article manufactured in this establishment is highly esteemed, from its unusual cleanness and beautiful texture; these qualities being particularly noticed in a lace veil lately presented to H.R.H. the Duchess of Brabant. Subsequently, a large party were noticed at dinner, who then conducted themselves quietly, the same as ordinary persons, and really behaved very like rational creatures. In another apartment, upwards of a dozen young females—all idiots or imbeciles—were assembled at their singing-lesson, under the tuition of a zealous "sister." These poor girls sung delightfully, accompanied by their teacher on the piano, which made quite a musical treat; and as several juvenile performers were blind or dumb, while their execution hence seemed more surprising, this unexpected performance by intellectually bedimmed and unfortunate fellow-creatures caused us greater gratification. Many inmates seemed helpless from physical infirmities; but, considering their previous position in the external world, they now lived comparatively more comfortable.

The number of resident lunatics under treatment, on the day of my visit, amounted to 269 altogether, of whom 201 were considered incurables, and twenty-five as doubtful, in reference to any prospect of ultimate recovery; the remainder being classed as curable or recent cases. The agitated patients were reported at fifty; the epileptics comprised forty-seven examples; whilst the dirty furnished thirty instances. No person was under restraint of any kind whatever, nor in seclusion. Indeed, it may be added that, physical coercion in any form is very seldom employed at this establishment; the great objects constantly kept in view being to amuse and occupy the inmates, whereby tranquillity becomes promoted, at the same time that such means tend to improve their mental condition.

About half the entire population are usually engaged in some kind of employment. Many zealously spend hours in lace-making—the common occupation of females in this part of Flanders. Numbers work as mantua-makers; others in the laundry, and at wool-picking; besides a large proportion who attend to household and domestic duties; as, also, knitting stockings, or in making and mending clothes; of which the amount annually accomplished is considerable. It must however be added, that M.

Guislain does not consider the quantity of work done as always an unerring criterion of its utility. He even objects to any excessive development of physical labour in confined apartments, or close workshops, as thus imparting to the establishment an aspect of being a factory, a prison, or like ordinary dépôts of mendicity. Further, M. Guislain thinks, unless the occupation chosen is carried out with discernment and caution, it may aggravate a lunatic's malady; whilst bodily labour which is severe, fatiguing, or too long continued, may do much harm; nay, even render the mental disease incurable.

During the past year seventy-seven new patients were admitted, and sixteen discharged cured, the deaths reported being thirty-two; thereby showing that recoveries were few, and fatal cases numerous. Amongst the latter, nine were cases of dementia, seven melancholia, and four general paralysis; the rest being mania and other varieties. Viewed with reference to the chief pathological phenomena observed, chest diseases were most numerous, affections of the abdominal viscera followed next, whilst the cerebral and nervous system supplied the fewest fatal illustrations.

Somewhat analogous to the experience observed amongst male patients, in reference to particular causes producing insanity, it may be also said that, moral influences were frequently reported, of which anxiety, chagrin, family misfortunes, devotion, and religious exaltation, seemed the most common; whereas the abuse of intoxicating liquors was very rarely observed. On the other hand, affections of the sexual organs, and disordered catamenia, not unfrequently appeared to have been a marked exciting cause of mental disease amongst female inmates.

Similar to the asylum for males, the medical staff at this institution consists of one attending physician, M. Guislain—its presiding genius—one consulting surgeon, and Dr. Vermeulen, the assistant physician; all being non-resident. Besides the "Sœur Supérieure" there are also thirty-one Sisters of Charity; of whom one is secretary, another music-mistress, while others are teachers of various departments, and chief superintendents; as also in other capacities, throughout different wards. To these, ten lay-female servants, with seven assistants, must be added; thus making altogether forty-eight actual attendants for 269 patients, or one to every six lunatic inmates.

Irrespective of the ordinary officials now enumerated, usually three male domestics belong to this establishment, who act as porters, messengers, and in out-door employments. Such appendages become absolutely necessary, when readers are informed, *No "sœur religieuse" attached to the institution ever goes beyond its threshold; that being contrary to her sacred vows.*

To these estimable females external society is closed for ever. Night and day must be wholly spent in assisting afflicted fellow-creatures. They sleep constantly on straw, and are devoid of all toilet luxuries; frequently fast, and pass much time in prayer, both late and early, at all seasons; yea, even when others are sound asleep. In truth, their whole existence seems a life of devotion and virtual self-sacrifice, which they here dedicate entirely to alleviate the sufferings of those insane persons who have come under surveillance. With reference to such sisters, one important feature should be further stated—viz., all rise regularly at 3.30 A.M., notwithstanding they were previously out of bed to assist at early religious duties in chapel, and although perhaps called up during night-time, to visit patients on emergencies. Many of the above enthusiastically unselfish ladies are persons of family, who have retired from the outer world with its varied allurements, so as to employ their mental energies and physical strength in attending upon the sick and unfortunate, without any prospect of fee or reward, on this side the grave. Nay, “sœurs” of the class described will frequently undergo privations, in order to assist others when required; and some will also contentedly injure present health, or peril life, in the great cause of benevolence, while aiding frail humanity.

Adjoining this establishment, but quite distinct in respect of all domestic arrangements, yet still under the same board of management, a “Maison de Santé” is attached, which has an entrance in the adjacent “Rue d’Assaut.” This female precinct is exclusively appropriated for the reception of private insane patients, who pay from 600 to 3000 francs annually. The house in which they lodge is a large, commodious, and well-furnished mansion, having in front one small, although rather pretty garden. When I visited this department the number of inmates amounted to sixty lunatics, with fourteen Sisters of Charity, seven female servants, and two assistants. Thus making, altogether, eighty-two persons living within its enclosure; and hence, giving the proportion of one sane to nearly every three insane residents. M. Guislain is superintending physician, while the same assistant also officiates who is attached to the asylum for indigents.

3. *The Strop “Maison de Santé.”*—Another establishment must likewise be noticed, although briefly, in connexion with the institutions for insane patients, located in or near Ghent, and to which M. Guislain is the attending physician, besides being further under the same directing management as the preceding. This asylum occupies an elevation not far from one of the city gates, is well ventilated, and has been constructed in an apparently salubrious locality. When I visited the institution, various buildings were in course of construction, including a new kitchen, and

dormitory for dirty patients, in order thereby to afford additional accommodation. There is also a rather pretty garden attached. Still, to my apprehension, the whole enclosure then seemed too limited in extent for its present large population. Fifty patients were under treatment, all being of the upper and middle classes of society. The payments for board vary from 600 to 3000 francs annually; but sometimes beyond that sum, and even up to 6000 is paid, when any inmate requires a "frère" as his exclusive attendant, with also one or two apartments.

The head authority, or chief manager of this establishment is a clergyman, designated "*Le père supérieur.*" Besides having several lay-servants, for menial occupations, he has also under his direction twenty "*frères religieux,*" attached to an order whose denomination has escaped my remembrance. These officials overlook the various departments, and perform different assigned duties. In fact, they constitute the only attendants upon the patients; no female being ever permitted to remain within the forbidden precincts—to them—of this "*sanctum insanorum.*" Moreover, unless in reference to medical treatment, with its chief direction, the whole internal management and discipline of this institution remains specially subjected to clerical superintendence.

During the past year, sixteen new patients were admitted, and seven discharged cured, while six deaths were reported. Hence, here as elsewhere, the ratio of recoveries proved small, and that of deaths large; when their several proportions are calculated according to the number of admissions.

4. *The New Asylum.*—Before taking leave of Ghent, and its insane establishments, some brief remarks respecting the large public asylum now constructing for indigent male lunatics, will neither seem out of place nor uninteresting. The locality chosen is situated at a short distance beyond the Bruges-gate, and occupies an agreeable, open position, not overlooked by any other buildings; while otherwise it appears well selected for the purpose proposed. The structure is palatial-looking, has the form of a horse-shoe, rises two stories high, with various collateral appendages; and lastly, an elegant chapel will occupy its centre. The original plan and general programme was traced by M. Guislain; who, besides being an eminent physician and zealous cultivator of science, is likewise an excellent practical engineer and architect. The execution and final completion of the entire building has been entrusted to M. Pauli, well known in Belgium as a man of talent; and may be, it is confidently expected, ready for the reception of patients about eighteen months hence, or early in 1858; when there will exist altogether accommodation for 300 insane residents.

The erection of this public institution virtually constitutes a

new era in Belgium, with reference to the management of lunatics; being the first receptacle of the kind in this country expressly constructed for their reception. It is likewise an eloquent manifestation of the great progress which has recently taken place in public opinion, respecting the objects to be kept constantly in view, wherever insane persons are brought together, for the purpose of treatment and protection. The new building, when finished, must further serve as a model for other establishments of the same description, which cannot fail to be constructed, before any long period elapses, in various Belgian provinces, now wholly devoid of such accommodation. Lastly, it is likely to become one of the most remarkable institutions throughout Europe, appropriated solely as an asylum for the insane.

The hospital administration of Ghent and general Government have both contributed towards the expenses incurred, which must amount to nearly a million of francs, before the whole structure is finished. But the money will be well expended, although hypercritics may likely say that too much has been laid out on its external embellishments, ornamented turret-looking chimneys, and minutely indented cornices. Such parties ought, however, to recollect that, being the first public asylum erected under government sanction, if it attracts more attention and discussion, even upon similar points, so much the better. Nay, should detractors object "to place paupers in palaces," which might be most justly said, occurs in the present instance, other provinces can avoid committing a similar error, in regard to future analogous establishments, by attending chiefly to internal arrangements.

Judging from the portion already finished, the entire construction will certainly prove very fine and imposing. The dormitories are not too large, or intended to contain so many inmates, as numerous similar apartments often seen on the Continent. They are lofty, spacious, and properly ventilated; having windows of greater magnitude than ordinary. Nowhere, unless at the new asylum of Auxerre, in France, have the sleeping rooms pleased me so much as those I noticed at this institution. Indeed, altogether, they appeared of a very superior description. Amongst many excellences which characterize its general features, in my opinion, the court intended for agitated patients is an exception, from not seeming well adapted for the purpose proposed. Being placed outside the round portion of this horse-shoe-shaped building, it will thus be more difficult to exercise constant surveillance over numerous excited inmates, than in square enclosures. A greater number of attendants will hence be required; while one, at least, must always station himself near the central concave part of the outer encircling wall, in order to overlook, at the same time, as large a portion as possible of this

really extensive enclosure. Still, that arrangement cannot remove the above objection; consequently, either more assistants will become necessary, or the space now intended for one must ultimately form two divisions.

Irrespective, however, of so very minor a fault in detail, and, perhaps, some other objections equally unimportant, there is yet no question regarding the undoubted superiority of this new construction, in every essential feature, over all previous asylums, appropriated for receiving lunatic patients, throughout Belgium. It cannot otherwise prove than of inestimable value to the afflicted insane poor of that country, and reflects great credit on the Government who promoted, as also those provinces contributing towards raising such an elegant structure. But to no person whatever will honour be more deservedly due than to M. Guislain—the original projector, who continues most zealous in his endeavours to ensure its perfect and final completion. Hence, the edifice should be named “L’Asile Guislain.”

(To be continued.)

ART. V.—PHILOSOPHICAL MEDICINE.

MOST modern medical authors have concerned themselves greatly with questions and inquiries which are fragmentary and shifting. Libraries have been written upon special modes and niceties in treatment, phases of disease, and theories subtending the *modus operandi* of evanescent remedies. While much of the medical literature of the age results thus, on the whole, in a painful and disappointing reiteration of principles which are unsettled, and opinions which are often merely academical, the philosophy of medicine has come to be virtually ignored. The young physician is not taught to think systematically for himself, but rather asked to observe what others have mapped out for him. He is educated in the confused belief that there are facts belonging to theories, and theories somehow flowing from facts, not by any necessary process of induction, but on the authority of certain doctrines, and of names, which he is bound to revere. He looks in vain, if he looks at all, for something in modern medicine to satisfy the reasoning powers. He misses a consistent and complete philosophy of the whole subject. Glimpses there are in various works of the day—works, many of them, in other respects of the highest value—of philosophical methods of observation and research in medicine; but, fragmentary and shifting, these serve rather to confuse the wanderer in search of a system. Whether from a too exclusive education, or from some other cause, the author-teachers of our day do not seem to recognise the intellect as a main agent of research in medicine.

Never was it more the fashion to decry empiricism—to undervalue the aids of simple observation and experience,—and yet by a seeming, though not a real contradiction, never perhaps has medicine been so *material* in its doctrines and in its practice as it is now. Histology, chemical analysis, and minutiae in physical diagnosis, are held up to the attention of enthusiastic disciples, as the chief of professional attainments—the indispensable, almost the exclusive, means of research; as, certainly, they are the pillars of that bare scientific medicine which, under the meaningless title of *Rational*, has latterly vaunted itself, perhaps too rashly. To this too exclusive education of the senses, a theoretical medicine has been added, which wants value, because it does not include—nor is it even based upon—any consistent scheme of observation capable of being applied, as a whole, to practical medicine. Thus, the essential characteristics of the medicine of the modern schools are, the pursuit of extreme physical analysis on the one hand, and on the other a tendency to rash mental deductions. What seems wanting is a consistent, and withal a complete, philosophy of medicine. But is such a philosophical system possible?—and if possible, is it likely to be valuable as a guide to an improved, and an improving, treatment of disease? In now attempting to answer these questions, on the whole, satisfactorily in the affirmative, we may, not inaptly, glance back at certain phases through which our individual medical faith has passed, as illustrative of what we have just been saying respecting the incompleteness of modern medical doctrines, and their insufficiency, as a connected system, to satisfy the intellect.

Like most of those who early imbibe the notion that there is an academical road to medical learning, we commenced with a vast contempt for empirical knowledge in general, and a silent distrust of data derivable from observation and experience. Proportionately enamoured of theories of disease, and full of sympathy for all attempts at demonstrating the *modus operandi* of therapeutical remedies, we had faith, likewise, in those niceties in physical diagnosis, which are still the crowning boast of some clinical authorities. We were, in fact, a faithful disciple of that still reigning school, which, imitating our seniors, without inquiring into the meaning of the term—we were fond of designating “Rational Medicine.” It was at the bedside (but not in the wards of an hospital) that we first became distrustful of theory, and soon detected its insufficiency, and even its danger, as a guide in the treatment of disease. There, also, it was not long ere we were forced to embrace, what seemed to us then the distressing conviction, that minutiae in physical diagnosis are often impracticable, and, when practicable, generally useless in practice. As

to the probability of demonstrating the *modus operandi* of therapeutical remedies, that ambitious notion soon became dreamy, and finally vanished, as the baseless fabric of a vision. For, assuming that such an inquiry was not in itself the pursuit of a shadow, it soon became evident that, administered as drugs usually are, under every variety of condition, promiscuously and in combination, to avoid fallacy, an entirely original series of carefully guarded observations and experiments would first of all have to be instituted on every drug, and probably also on various doses of every drug separately;—a gigantic undertaking, and on the whole impracticable. Having reached this state of comparative negation—having lost much of our original faith in medicine, and our respect for it as a professed scientific system—by a natural reaction we took refuge in a creed of empiricism, and embraced the belief, once so distasteful, that there is no rational foundation possible for medicine, save what rests on a wise observation and experience. In that instructive region which lies behind us—a region still too little explored, we think, by many of our modern teachers—we found not a little to reconcile us to such a faith. Great men lived before Epaminondas, and we never could sympathize with that tone of affected contempt or pity with which it has latterly been the mode to speak of the ancient physicians. We never could bring ourselves to believe that those painstaking observers were the wilful and ignorant empirics they are so often represented. We have good evidence that many of them were guided by what corresponded in their day to enlightened experience. Defective on some vital points, as their knowledge unquestionably was, the accuracy of their descriptions of diseases which are still common, and their conceptions of pathological conditions in relation to prognosis, are, after all, wonderful monuments of an intellectual medicine, which, with all our modern physical aids to the senses, we should not be ashamed to venerate. Obscurity veils their modes of therapeutical treatment; but it is to them we owe most of the drugs on which physicians, after many vain new therapeutical flights, are compelled mainly to rely at this hour. To us, then, it seemed that a modern empiricism—founded like the ancient, on observation and experience, taking advantage besides of the advances since made in various departments of medical research—was the only consistent faith, in the present state of that healing *art*, which, assuredly, has not yet put on the veritable garb of *science*. Such was—such, partly, still is—our medical faith; and, unsatisfactory as in some respects it may have been, we felt it, and we still consider it, safer than that in which we set out. As we have said, we had caught glimpses, here and there, of philosophical design; but

these were only fragmentary, and failed to do more than suggest what we think we have at length found in a work lately published*—something nearly approaching to a connected and consistent philosophy of medicine.

Such a philosophical scheme we feel bound to accept, in the mean time, as the only possible compromise between modern empiricism, and that intolerant and self-styled rationalism which seeks to impose itself on us under the mask of science. Scientific medicine, *per se*, we have found to be unsafe, chaotic, impracticable. Empirical medicine, *per se*, we have found to be, in a different direction, unsatisfying to the intellect. Of philosophical medicine, *per se*, we cannot properly speak; because, as philosophy, it includes and inculcates whatever is practicable and true in all systems. This is its distinguishing characteristic and excellence; without which it would not be a philosophical, but, like much that has preceded it, a dogmatic, or merely doctrinal medicine. If, then, philosophical medicine has any special mission, it is not that of revolutionizing, but that of reconstructing the healing art, by showing us how the materials at our disposal—whether they be derivable from observation and experience, or theory, or art, or science—can be correctly employed, all together, or each in its proper place, in the researches and in the practice of medicine. How far, in the work of Dr. Laycock, now before us, such an attempt has been successfully made, we shall endeavour to determine, by instituting a general analysis of its scheme and method.

A distinguished metaphysician (Lewes) has observed, "It is a law of the human mind that speculations on all generalities begin deductively; and the only road to truth is to begin inductively." If this be true, need we wonder that in medicine, as in philosophy, bold speculations should so often precede or anticipate that train of corrected observations on which they ought to be based; and that theories and hypotheses, so adopted, should be retained in medicine under the name of facts or truths? To obviate this fundamental error in method, philosophical medicine requires that we begin on an inductive basis; and so far from rejecting or despising observation and experience, even of the simplest kind, that we accept them as of the first value in medical research. But then, in complex inquiries such as those of medicine, there are obviously two kinds of observation, and consequently a difference in the inductions derivable from them; and likewise there are two kinds of experience. There are what may be termed a blind observation, and a simple or unenlightened experience; as well as a corrected or compared obser-

* *Lectures on the Principles and Methods of Observation and Research.* By Thomas Laycock, M.D., &c., Professor of the Practice of Medicine, and of Clinical Medicine, in the University of Edinburgh. Edinburgh, 1856.

vation, and an enlightened experience. It is on the latter that philosophical medicine leans; although it by no means denies the use, or even the value, of the former. Again, though secondary in the ranks of an inductive method of research, hypothesis and theory are quite admissible; and rightly admitted, they are of great value also in medicine. Locke, speaking of their employment in general philosophy, says, "If they are well made, they are at least great helps to the memory, and often direct us to new discoveries. But we should not take up any one too hastily, *which the mind, that would always penetrate into the causes of things, and have principles to rest on*, is very apt to do. And, at least, that the name of *principles* deceive us not, nor impose on us, by making us receive that for an unquestionable truth which is really a very doubtful conjecture." Philosophical medicine admits, therefore, not crude theory, but the combination of theory with observation and experience. Thus combined, but not otherwise, theories are, in fact, essential to medical research. But, as Bacon, in enunciating the inductive method in philosophy, was careful to point out, there are various idols, or fallacies, which are apt to beset the inquirer; and, accordingly, philosophical medicine requires that these, as they affect medical methods of research, should be thoroughly exposed, in order that they may be avoided. Perhaps, the chief theoretical fallacies here to be guarded against, are, the indefinite use of terms, the substitution of theories themselves for medical facts, and the *post hoc ergo propter hoc*, so common in etiological and therapeutical inquiries. These common fallacies of theory are capable of being detected by the test of experience; and what may be termed compound fallacies in theory, are also amenable to the same tribunal. Experience is, in fact, "the Ithuriel's spear for all hypothetical conclusions or theoretical views we may be tempted to adopt in medicine." Moreover, no true theory is possible without scientific knowledge and inquiry; science is, therefore, a necessary element in a philosophical system of medicine.

On such a foundation we may speak of medical *science*, without holding that medicine is now, or need necessarily ever attain, the rank of a true or exact science. The basis of our medical science is none other than experience; and it results that it may be practised as an *art*. Out of this arises a consideration of the methods and the aids by which medicine is to be practised. There are instrumental aids, aids to the senses, and there are aids to the intellect alone. The latter involve subjects for special consideration. As to the former, it is most important to take a correct estimate of aids to clinical research. The senses may be educated at the expense of the intellect. Microscopical

research may be abused, and too great a dependence upon it is imminently dangerous, as evinced by the errors into which modern pathologists have fallen. The stethoscope, also, will have much to answer for, if it call off attention which should be directed to the general outward features of disease. Symptoms are often of great value, and there is a *physiognomy* of disease which richly deserves study. Physiognomical diagnosis, though as yet only rudimentary, is a singularly important department of practical medicine; and, when more fully developed, "*will add more to our available knowledge than physical diagnosis, in the same proportion as the reason penetrates more deeply than the senses into the nature of things.*" It is likewise of great moment to arrive at the causes of disease, by tracing, when practicable, the origin and order of etiological phenomena; that is, in fact, the order of succession of vital phenomena. Here, as in some other places, medical science presents a large gap, or hiatus, which must, in the construction of a connected philosophical system, be filled up with all convenient diligence. For instance—"We know something of the alternations, sleeping and waking, of the menstrual period, of the periodical influence of night and day, and of the seasons. Nor are we altogether ignorant of the morbid changes to which each age and sex are liable at different ages, and the like. We know, too, the periods of several forms of fever, such as the exanthemata and the intermittents. Little of this knowledge, however, has as yet entered the domain of physiological science, and even, as to pathology and prognosis, the general, or at least the accepted knowledge of critical days is hardly more applicable to clinical medicine than in the time of Galen."

Clinical examination (or diagnosis) is further to be prosecuted, in general, on the natural method; that is, by "simple observation of the phenomena of the disease, and comparison of them with one another, and with the knowledge which the practitioner has acquired of similar phenomena, either by instruction or experience;" and the disease having in this way been determined, the therapeutical diagnosis, that is, the treatment of the disease, naturally arises out of it. But here, in entering on the management and supervision of the patient, there are certain general morbid conditions to be kept in view—the various diatheses and cachexiæ. A diathesis is an innate hereditary constitution of the body; whilst a cachexia is essentially an actually existing state, which, though not hereditary, may also be acquired by the patient himself. An acquaintance with the signs and symptoms of the various diatheses and cachexiæ, in all their combinations, is of much greater moment to the treatment of disease in general than has hitherto been supposed. Our author enters upon a

very careful consideration of them, which he concludes thus :—
 “I have dwelt at some length upon these cachexiæ, as important *notanda* when taking a case, partly because there can be no philosophical diagnosis or therapeutics without a thorough knowledge of them, but mainly because the information regarding them, in our systematic works on medicine, is scattered through many volumes, and, at best, is imperfect. What I have detailed is the result of much careful observation and thought on my own part.”

Next, in prognosis, which in its turn arises out of the therapeutical diagnosis, the signification, and not the extent of phenomena, is the important element ; phenomena being minute in a popular or relative sense only. Thus, the detection and calculation of critical days, and the mode of observing periodic changes in fevers and disease generally, deserve careful study. Menstrual and dentitional periods, also, are important, because significant, phenomena. Under this category comes, likewise, the observation of meteorological influences, and seasonal changes affecting diseases—departments once neglected, but the importance of which is now beginning to be appreciated. “Henceforth medical meteorology must take its place in the cycle of the medical sciences.” Prognosis, thus, may be termed scientific, inasmuch as it is founded on certain laws of occurrence and recurrence ; but it is also empirical, inasmuch as it is often simply dependent on observation and experience. To this scheme of clinical observation our author adds an instructive lecture, “On the Due Estimate of Treatment, and on the Management of the Case.” Herein he notices certain sources of fallacy—similar to those of theory, chiefly as to cause and effect, formerly adverted to—which are apt to invade therapeutical observations, and vitiate therapeutical conclusions. In the management of the case, perhaps the chief points are, the due estimate of probabilities, and the exercise of a moral control and influence over the patient.

This completes what on an ordinary system would be (it is here only philosophically connected and arranged) a summary of clinical medicine. But an inductive scheme of medical research would not be philosophically consistent and complete, without the application to medicine of those aids also to the intellectual powers which the inductive philosophy has supplied, with the happiest results, to other branches of experimental knowledge. Hence follows a consideration of two methods, both of which are open to us in this intellectual field. First, the simple numerical method ; secondly, that more extended philosophical method, which our author has termed the *analogical*. These “have each a special value, according to the nature of the

questions to be solved." The *numerical method* (which in its applications to political economy is termed generally *statistics*) has, in medicine, been too much disparaged on the one hand, and over-estimated on the other—"The fallacies of other methods in medical research affect equally the numerical ;" and this is especially true as regards the use of terms. All our collective terms in medicine being more or less fallacious, "the collective facts which they express are necessarily fallacious too, both as to the deductions that may be drawn from them, and the simplest information they may convey." It is, however, in the tabulation of events of a simple character that vital statistics are of most value ; and one of the great objects of numerical investigation—indeed *the* knowledge specially aimed at—is "to determine the order of events, or, in other words, the relation of cause and effect." At the same time, vital statistics are liable to serious fallacies, which, as public hygiene is now a recognised branch of medicine, ought to be carefully discriminated—"It must always be remembered that, in proportion as the circumstances or events to be compared increase in number, the sources of fallacies increase in perhaps more than a geometrical proportion." Moreover, "a numerical statement may be true, as a mere fact of experience, but fallacious as premises for comparison and deduction." It is, therefore, necessary to adopt certain defined precautions in the application of the numerical method to the investigation of questions in life and organization. On the whole, this method is of limited application to the investigations of medical science ; for, "inasmuch as it reduces everything to numerical ratios and expressions, it necessarily deals only with facts and observations capable of such reduction. But these are but a few of the facts of medicine." Hence the necessity, in a full philosophical scheme, for some less restricted method of medical research ; a method which may extend its inquiry to all facts ; which may make use of the numerical method, but as a subordinate instrument only—a method, in short, eminently comprehensive and philosophical.

In what he terms the *analogical*, or by excellence the *philosophical*, our author believes he has discovered such a method of research. And here, in noticing the crowning part of his work, we would pause to claim for Dr. Laycock the merit of decided originality. The doctrines of the so-called transcendental anatomy, since first enunciated by Oken and Von Bär, have been freely applied to abstract physiology, and may even have proved suggestive, in an incidental way, in other medical directions ; but, so far as we know, our author has been the first to found upon the doctrine of the unity of structure and function of organisms a distinct and connected method, practically avail-

able in medicine. Should this method, therefore, become generally recognised, and stand the test of experience, it is not too much to say, that its author should take a place amongst those who correspond, in the historical progress of medicine, to the Newtons and the Bacons of science and philosophy. From what has gone before, it will be apparent, at least, that we have been listening to no mere medical enthusiast—still less to one superficially versed, either in science or general philosophy; we should, therefore, be all the more ready to give to this new method—which is itself, indeed, almost a distinct philosophy of medicine—a serious and respectful attention. For the present, we regret that the lecture which our author devotes to the subject must be dismissed with the same analytic brevity that has marked our notice of the preceding longer, but not more important, part of the work.

The analogical method begins by taking up a new standpoint. Whereas the systems hitherto propounded, under the title of Rational or Scientific, have—all of them admittedly or impliedly—actually started from the admission that medicine possesses no primitive fact, no primary *law*; the analogical method starts from, or upon, a great principle, which already has something more to rest on than conjecture or opinion, since it has found acceptance in physiology, but which has yet been overlooked as a guide in practical medicine. This method analyses pathology, and finds it to be pathological physiology, and, therefore, still physiology; disease being “simply a deviation from the natural order of events as to the structure and functions of the body.” The great truth of human physiology is, “that man is but a link in the infinite scheme of life; and the primary or fundamental principle of life is the unity of structure and function of organisms.” Now, this principle of life and organization is of unlimited application, and more especially as a guide to correct medical theory; although it need not be the starting-point of all theories, inasmuch as there are principles of more limited application which may be used under, or within, the higher one. Thus, the principle that will guide us most readily to true analogies is this simple numerical principle, “that phenomena agreeing upon one point be collated as to that point in all their relations.” Then, *discovery by true analogies is always progressive*. “Just (says our author) as in the numerical method the result of one tabulation leads on to another tabulation, and its result to another, so one analogy leads on to another investigation and arrangement of phenomena and another analogy; this to another and so on, *ad infinitum*, or so long as the inquirer can carry on his researches and attain to new facts. The only limit, indeed, to his discoveries is to be found in his limited powers of investigation; but the intellect

practised in this method will penetrate in *idea* far beyond the horizon of the demonstrable, and see more or less clearly in the far distance analogies grander and yet grander still. The principle of unity of life and organization is all comprehensive; MIND, therefore, comes within the range of its operations as well as matter. This is a grand principle, for it is pregnant with researches and results of the highest importance to man in his social, moral, and intellectual relations."

Practical examples of the conduct of an analogical investigation are next given at length. Our author then considers, lucidly, certain objections that may be urged against it, and concludes with some hints as to the uses of this analogical method. Referring our readers to the suggestive and original volume of which we are now reluctantly compelled to take leave, we have but a single sentence to add, critical of this new method of medical observation and research.

Its author terms it a philosophical method. It is eminently so: indeed, it alone deserves, as it seems to us, to be so entitled by excellence. Viewing it, however, for the present, in its theoretical aspects, we might, perhaps, venture respectfully to doubt whether that other title—the purely inductive method of research—which its author has also given to it, be equally significant of its early tendencies. As including and using the numerical method, it is doubtless inductive; but, in another light, it is not *purely* so. It is inductive *à priori*, rather than *à posteriori*. For a time, at least, such a method must proceed more or less on axioms which have still to undergo laborious, or, at least, lengthened, processes of verification. But when the principle on which it is founded comes to be generally accepted—and, with our author, we venture to predict its ultimate general acceptance—this method, then no longer new, will become more and more purely inductive. Of its probable value, of its ultimate results, of its professional acceptance, it is not for us to say much now. Like all new ideas, it has its battle still to fight, and experience does not warrant us to predict that it will be at once cordially hailed generally—as we cordially hail it—in the light of a great step towards a consistent and complete philosophy of medicine. Few men less thoroughly accomplished than our author in every branch of medical science, and versed at the same time in general philosophy, could, or would, have given it to the profession, in the face of oscillating views which it is calculated to supersede. The book we have thus carefully analysed, but very imperfectly reviewed, is not great in point of size; but it outweighs very many larger modern treatises—not merely because it dates from a chair where sat a Gregory and an Alison, but because it indoctrinates that *intellectual* medicine which modern progress begins to demand.

ART. VI.—MENTAL LABOUR; ITS EFFECTS ON THE BLOOD.*

BY THEOPHILUS THOMPSON, M.D., F.R.S.,

Physician to the Hospital for Consumption and Diseases of the Chest, &c.

THE progress of civilization, notwithstanding the incalculable benefits with which it is attended, nevertheless involves many countervailing evils; but it is impossible to direct much thoughtful observation to the present condition of the world, without being impressed with the conviction that, amongst the causes of disappointment associated with modern advancement, there are some which are not necessarily irremediable. Among the subjects for inquiry intimately related to this topic, there are few which are more likely to reward investigation than those which regard the reciprocal influence of mental and physical conditions.

The invention of printing, by the aid of which civilization has been pre-eminently promoted, in giving permanence to acquired knowledge, has so raised the general standard of attainment and taste, that distinction in the walks of literature or science can rarely be attained, excepting by an amount of assiduous labour such as can be endured only by individuals whose constitutions are distinguished by a peculiar combination of physical and intellectual energy. As the number of aspirants to distinction multiplies, sympathy becomes more intense, taste more fastidious, competition more keen, and the craving for intellectual enjoyment increasing with the means for its gratification, an honourable association with the highly-cultivated classes of society cannot be maintained without considerable mental effort. The struggle for eminence in any department of intellectual labour involves a concentration of mind on the special subject, which, if long protracted, is particularly calculated to induce disorder.

The tendency to such concentration, increased by habit, becoming in some individuals almost irresistible, proves seriously detrimental to the mental and bodily health.

Whether the continuous exertion of one faculty acts unfavourably by withdrawing the circulating fluid from other organs, and so disturbing the healthy balance, or whether excessive action of a particular faculty exhausts some special material of the blood, is a question which cannot, perhaps, in the present state of our knowledge, be positively determined; but instances of morbid condition thus induced are continually presenting themselves to the physician.

* Read before the Medical Society of London, November 29th, 1856.

Intellectual, like muscular action, probably involves an expenditure of living material, and introduces a changing series of particles—those which have been used giving place to others, which come with the energy of new life to perpetuate the action. There may be decay from stagnation—there may be waste from persistency, undue haste or intensity, especially in creative efforts. It is only when the function is performed in a calm and equable manner that the equilibrium of expenditure and supply is maintained, and that power is preserved and increased.

Not long since an account-keeper from a large public establishment, where he had been accustomed to work without intermission twelve hours daily, came to my consulting-room almost in tears, saying he was fit for nothing, feeling as though cut off from everything, and as if, when he attempted to fix his attention on any subject, some indescribable influence drew it away—a distressing sensation in the chest, and tingling of skin, as though the bed was full of fleas, often keeping him awake; and his sleep disturbed by frightful dreams. His height was 5 feet 5 inches; weight-129 lbs.; appetite good; tongue natural; bowels regular; urine slightly acid, of good colour, its specific gravity 1025, containing a very few small oxalate of lime crystals, and scanty lithates. Pulse 88, not strong; skin moist. There was a strong continuous venous hum in both jugular veins, heard the more distinctly on checking respiration, but not overpowering the sound of the arterial pulse. When he cuts himself in shaving, the blood flows freely, and is with difficulty stanchd. Under the microscope, a remarkably small number of pale-coloured corpuscles in proportion to the red discs, was observable—a peculiarity which has repeatedly arrested my attention in cases associated with venous murmur, remarkably contrasting in this respect with the condition of blood ordinarily present in pulmonary consumption. Assuming that the relative proportion of pale corpuscles to the red is in phthisis one in ten; in healthy individuals one in fifty, the blood of patients belonging to the class under consideration has appeared to me to exhibit a proportion of about one in two hundred. I am inclined to suspect that this peculiarity is associated with deficient quantity of fibrin—a condition the reverse of that which usually obtains amongst consumptive individuals. But observations require to be extensively multiplied before we can safely venture in this matter to propound a rule.

Some of the evils briefly noticed in my preliminary remarks press with peculiar force on the clergy. Often beginning life with anxious competition for university honours, they pass at an early period of their career into responsible duty, debarred by

conventional rules from many innocent recreations, subjected to unusual restraint of demeanour, restricted to intellectual pursuits which overtax particular faculties, to the comparative neglect of others, and exposed in more than the average degree to the wear of sympathy, it is not surprising that the younger clergy, before their constitutions are consolidated, become so often the subjects of bodily infirmity, their nervous system unduly susceptible, and their minds too easily accessible to the delusions of pseudo-science and quackery.

A popular clergyman, of active sensitive mind, aged forty-three, but from his grey hair and general aspect likely to be considered fifty, had been, since he left the university, affected in a great degree with sleeplessness; often for weeks together not sleeping at night more than two hours. He could not refer this inaptitude for sleep to any physical cause. The alvine and renal evacuations were natural, and muscular strength good; but the pulse was rather weak; there was a marked murmur in the right jugular vein, and he complained of deficient intellectual power as respected the suggestion of ideas. I prescribed cod liver oil, and nitro-hydrochloric acid. The pulse improved, and in three weeks his average sleep was five hours a night. I then administered phosphate of iron, with phosphoric acid. In two or three months he recovered a fair degree of health, the venous murmur was scarcely audible, and the sleepless nights and feeling of mental sterility occurred only occasionally after extra efforts of composition.

In the summer of 1855, after anxiety connected with schools, and claims on his sympathy in consequence of affliction among friends, a relapse occurred. I sent him to the country with injunctions to avoid as much as possible the society of civilized man. He at first gained little ground, being much engaged in discussion with intelligent acquaintances; but on removing to a more secluded spot to vegetate in the open air, his powers of sleep and composition returned.

The nature of ordinary cases of the kind referred to, may be illustrated by reference to those of an extreme character: a sudden shock to the nervous system, whether physical or mental, tending to induce conditions more severe in degree but analogous in nature to those resulting from the slighter, but more continuous series of shocks produced by the wear of anxious intellectual effort and disturbed sympathy.

A few years since, an express train on its way to meet the Queen, ran into another, and many of the passengers were injured. A lady, aged 33, had her head severely wounded, the scalp laid bare, one ear nearly cut off, the teeth knocked in; Mr. Bransby Cooper, who attended her, said she must have had

an unparalleled constitution not to have sunk. There was no great loss of blood, but she suffered for some time after the accident from hysterical cough, and inability, as she said, to swallow except by sips—became thin and pallid—the heart excessively irritable. These conditions, accompanied with a venous murmur, continued last year, and although materially benefited by the administration of zinc and cod-liver oil, they still continue in a considerable degree. The symptoms in this patient are not fairly referable to loss of blood. Her sister, who suffered from the same catastrophe, lost much more blood; but her subsequent ailments, although presenting slight analogies, were much less severe, and not accompanied with venous murmur.

I would here present a case illustrative of the effects of brain-shock on the blood, which occurred in the practice of Sir Henry Marsh:*

“A young and beautiful woman in the middle rank of life, highly but self-educated, of great mental endowment, of admirable taste, and strong sensibility and attachment, was unconsciously the one by whose hand a poisonous dose was administered to her sole surviving parent, to whom she was attached with all the fervour and devotedness of a daughter's love. The phial contained an ounce and a half of laudanum; it was given by mistake for a senna draught. When presented to him by his daughter, he tasted it, and said he did not like it, and would not take it. He had not been in good health; it was with much entreaty he was ever prevailed on to take the medicines prescribed. She urged him in terms the most affectionate and persuasive to take his draught; he replied, ‘Dearest, you know I never can refuse you anything,’ and swallowed it. Three hours passed away before she was aware of her terrible mistake. She was aroused to it by the state of stupor into which her father had fallen, when it flashed across her mind. She found the senna draught which she had intended to have given untouched; she also found the word ‘poison’ printed in large letters on the empty phial. The shock to her mind was terrific. She became like one insane. All possible means were employed to save the life of the poisoned man, but they were employed too late. He died profoundly comatose at the end of a few hours. From the moment of his last breath a change came over her. She was lost to all knowledge or notice of persons and occurrences around; she lay like a statue, pale and motionless. Food she never took, excepting when it was placed upon her tongue. The only sound which escaped her lips was a faint yes or no. When asked what ailed her, she would place her hand upon her heart. Her extremities were cold. She

* Dublin Quarterly Journal of Medicine, August 1st, 1853, p. 1.

sighed and shivered frequently, and dosed brokenly and protractedly. To her, the world, and all things in it, were a blank. Tonics and stimulants were administered, air and scene were changed, kind and compassionate relatives and friends tried and tried in vain to rouse and console; she pined away, and nought but a breathing skeleton remained. She lingered on with very little variety or alteration of symptoms for ten months. Before her dissolution she became œdematous. The swelling, soft and transparent, was first perceived in the lower extremities, but gradually progressed upwards. It became apparent on the backs of the hands, along the arms, and ultimately it was universal. All the viscera, spinal, cerebral, thoracic, and abdominal, were patiently and minutely examined. No trace of organic change of structure could be detected. There was a copious effusion of thin transparent serum into every cavity—into every serous tissue. The pericardium was separated from the heart by an abundant effusion. The large amount of the dropsical effusion contrasted strangely with the extreme attenuation. In this case, to repress the increasing dropsy, ovipuncture had been several times practised, always with relieving effect; even with this deduction, the viscera appeared as it were bathed in water. This poor patient, beaten down in mind and body, breathed her last without a moan or a painful struggle. The mental shock had paralysed the vital actions, an evidence that, in real life, events do occur which transcend even the highest flights of fiction. An almost total suspension of nutrition, sanguification, and vascular energy characterized this case. The result was universal dropsy consisting in the thinnest serosity.”

I have known an engraver, after working long and successfully on cathedral drawings, unable to sleep soundly on account of being haunted with architectural lines; but he went out for a walk among the mountains, recovered his capability of sleeping, and came back home “hard as nails.”

Another engraver, (whom I attended,) anxiously and continuously engaged in the same department of work, in which he had greatly distinguished himself, became unable to recognise his own house.

A similar impairment of memory, accompanied as in the preceding instances with venous murmur, I have observed in some benevolent and conscientious individuals inordinately engaged in carrying out some scheme of philanthropy;—in others associated with mental depression, taking the direction of some unsound or narrow religious dogma;—and in professional men, worn with the stir and anxiety of life. In all such instances, measures calculated to enrich the blood have proved an im-

portant auxiliary to those which have respected mere change of scene and occupation.

The instances specially present to my mind in making this communication are not remarkable for any impairment of digestive function, and the attendant impoverishment of blood seems to be a result of nervous exhaustion. The somewhat pallid cheeks, the languid eye, the venous murmur, are in harmony with the intellectual manifestations,—in some sleeplessness,—in some inertness. The original writer complaining of a peculiar sterility of mind, and the close reasoner becoming fragmentary and unconnected in his trains of thought.

In all the conditions referred to there is a general analogy, but the special manifestations vary with the temperament of the individual patient. In the active and the sanguine, for example, sleeplessness is common, and a more than ordinary readiness to adopt any fashionable heresy in pseudo-science or theology. In persons of a more phlegmatic disposition there is induced great indisposition for exertion, a gloomy view of events, and perhaps a desponding estimate of their religious condition. When, as usually happens, duodenal indigestion is superadded, habitual depression of spirits is common, and oxalate of lime crystals may often be detected in the urine.

The amount of labour which different individuals can bear without such injury as we have described varies. Indeed, the mere amount is only part of the explanation—*anxiety*, *hurry*, and *exclusiveness* of work being more injurious than quantity. Work which is successful, varied, and pursued without hurry, although carried to a considerable extent, may be not only innocuous, but useful and even necessary. Indeed, without some degree of intellectual exercise, the body itself would languish. But there is a limit with every individual which cannot be safely passed; and it is the part of a wise man to watch, with a view to counteraction, the earliest indications of exhausting effort.

As respects treatment, those measures are most salutary which tend to enrich the blood. Chalybeates are sometimes useful; but in many instances they tend to increase irritability, and cannot, at least at the commencement, be safely employed. A course of cod-liver oil is seldom inappropriate, and this remedy may often be advantageously administered in combination with nitro-hydrochloric acid, especially when the appetite is defective, or the oxalic acid diathesis is present. To the subject of the importance of the remedial administration of oils, I am anxious to invite particular attention. About eighty years since cod-liver oil was largely employed at Manchester in the treatment of rheumatism, but was, after a time, superseded by other more agreeable medicines. The mode of action of the

remedy was not then ascertained, and its proper place as a medical agent was not determined. During the last twelve years the value of this medicine in the treatment of consumption has been established. With the aid of the medical press, observations on its effects by different practitioners have been extended and compared, and we have found reason to conclude that its efficacy in consumption depends not on any specific adaptation to that particular disease, but on qualities which render it of equal or superior service in other disorders presenting points of resemblance as respects some peculiar conditions of the blood, which the administration of the remedy is specially calculated to correct.*

Change of occupation and scene is of paramount importance. When the condition is not one of extreme exhaustion, an energetic tour is desirable ; in the more advanced cases, the disinclination for such an effort being extreme, or the excitability great, such a measure must not be abruptly commenced ; perfect repose for a time may then be expedient, and habits of activity gradually adopted. When intellectual work is resumed, many precautions should be observed. The times, amount, and method should be regulated, and probably even the posture in which mental processes are carried on. Analysis being with many students best effected in the recumbent posture, and composition while walking. The importance of exercise in the open air can scarcely be over-estimated. Indeed, although instances of the class described in this communication occur not unfrequently in persons careful to observe ordinary hygienic precautions, yet there are others in whom an amount of nervous irritability, associated with the other symptoms, may be mainly attributed to a neglect of muscular exercise, the special remedy for nervous excitability.

I have for various reasons expatiated on the class of cases associated with venous murmur, and other signs of anæmia or spanæmia—1st. Because they seem to me to indicate an order of succession in the phenomena not generally recognised, pointing to the conclusion that the brain may sometimes impoverish the blood, before the condition of the other organs disturbs the brain. 2ndly. Because such instances of cerebral exhaustion are those most amenable to treatment. 3rdly. Because the probable hereditary transmissibility of such conditions makes them of incalculable importance to the community.

It is a common remark, that the type of disease at different periods varies. In tracing some past eras of disease (speaking in general terms) we may conclude that the plethoric condition, prevalent in the 17th century, gave place in the 18th to gastric congestion. This condition has now ceased to predominate, and

* *Vide* "Clinical Lectures on Pulmonary Consumption." By Theophilus Thompson, M.D., F.R.S. London. 1854. pp. 67—85.

we have perhaps entered on an anæmic era—a state peculiarly unfavourable to the manifestation of power and to the production of great men.

For all classes, but especially for the professional, a prudent regard should be had to the probable production and ready aggravation of the anæmic condition from causes associated with the laws of mind. A different training, physical and intellectual, must be adopted by our clergy, if they are to be kept in the foreground of the domain of thought, and to be suffered to direct those energies of social life which it is our part, as medical men, to cherish.

As respects the application of medical theories, a wider range of thought should be pursued. The modifications of many prevalent diseases may have reference as much to mental states as to hygienic conditions of atmosphere and diet. Every remediable infirmity is a violation of the law of progress. If medicine is to render to the community a full amount of good, it must be not simply in treating the maladies of individual patients, but in ministering to the conditions which disturb the vitality of the race, and, thus whilst improving our appliances for daily work, remembering that we are enlisted in the service of mankind, we may make posterity our debtors.

ART. VII.—THE INSANITY OF KING GEORGE III.*

To the mere pathologist, the insanity of a prince is not more interesting than that of a peasant; but to the historian, to the medical jurist, to all who are engaged in the care of the insane, the attacks of George III. are invested with peculiar interest. He was a prominent figure in a period that teemed with great men and great events, whose memorials are yet around us; and twice the recurrence of his disorder gave rise to a degree of political feeling that has seldom been equalled, and to political discussions that settled for ever a vital principle in the British constitution.

George III. had a moderate intellectual capacity, but an obstinate will. Of abstract speculation he was totally incapable, and philosophical views of any kind were beyond his reach. His theory of government began and ended in a firm maintenance of the royal prerogative, and the whole duty and privilege of the subject were comprised in the single precept, *Fear God and honor the King*. As a result, partly of defective training and partly of original inaptitude, he disrelished intellectual

* Read before the Association of Superintendents of Insane Hospitals, May 22, 1855. By Dr. Ray, of Butler Hospital, Providence, R. I.—*From the American Journal of Insanity.*

pursuits, but was fond of mixing himself up with the administration of affairs, even in the smallest particulars. Here he showed no lack of industry, nor of energy. He was a stranger to sensual passion, and in the common observances of life was a model of propriety. He never forgot what he deemed an injury, and they who thwarted his wishes or opposed his measures were regarded as factious or dishonest. Always looking upon his eldest son as a kind of rival near the throne, "he hated him," says Brougham, "with a hatred scarcely consistent with the supposition of a sound mind." He was fond of music, and occasionally went to the theatre; but, with these exceptions, he sought for recreation solely in riding and walking, in looking after his farm, and in an easy intercourse with his family and dependents. Few men would have seemed less likely to be visited by insanity. His general health had been always good; his powers were impaired by none of those indulgences almost inseparable from the kingly station; he was remarkably abstemious at the table; and took much exercise in the open air. Insanity had never appeared in his family, and he was quite free from those eccentricities and peculiarities which indicate an ill-balanced mind.

Five times was George III. struck down by mental disease. The first was in the spring of 1765, when he was twenty-seven years old; the second in 1788; the third in 1801; the fourth in 1804; and the fifth in 1810. Excepting the last, from which he never recovered, the attacks were of comparatively short duration, none of them continuing very obviously beyond six months.

The particulars of the first attack were studiously concealed by his family, and its true character was not generally known at the time. There seems to be no doubt, however, that its symptoms were similar to those of the subsequent attacks. Shortly before, an eruption on the face, which had troubled him for some years, had so entirely disappeared, that it was supposed he had applied external remedies to repel it. This was followed by considerable cough and fever, and then by mental disturbance. In the course of a few weeks he completely recovered.

During the latter part of October, 1788, the King seemed to be not in his usual health. He had considerable pain in his limbs—felt weak—slept but little—was hurried and vehement in his manner. On the 22nd, he "manifested an agitation of spirits bordering on delirium," said his physician. A few days afterwards, on returning from a long ride, he burst into tears, and said, "he wished to God he might die, for he was going to be mad." He kept about until the 4th of November, when he had an outbreak at dinner, and was consigned to the charge of

attendants. During the first few days there was considerable constitutional disturbance, and it was feared he might not survive. One of Sheridan's correspondents says: "The doctors say it is impossible to survive it long, if his situation does not take some extraordinary change in a few hours. * * * Since this letter was begun, all articulation even seems to be at an end with the poor King; but, for the two hours preceding, he was in a most determined frenzy." In the course of the succeeding night he had a profuse stool, then perspired freely, and fell into a profound sleep. He awoke with but little fever, "but with all the gestures and ravings of the most confirmed maniac, and a new noise in imitation of the howling of a dog." He soon got calmer, and talked on religion, and of being inspired. A day or two after, the same person writes: "This morning he made an attempt to jump out of the window, and is now very turbulent and incoherent." He also states that the King revealed some state secrets, much to the astonishment of Pitt.*

Miss Burney, afterwards Madame D'Arblay, was then in the personal service of the Queen, and in her "Diary," recently published, the progress of the attack may be traced with some degree of minuteness. The first night after the outbreak at dinner, she states, he was very restless, getting up and wandering into the Queen's room to see if she was there, and talking incessantly until he became hoarse, exclaiming, "I am not ill; I am only nervous." "He was never so despotic; no one dared oppose him. He would not listen to a word." Next night he got up and insisted on going into the neighbouring room, where his equerries were. There he saw his physician, Sir George Baker, whom he called an old woman, and wondered that he ever took his advice, for he knew nothing of his complaint. From this time he rapidly grew worse. On the 12th and 13th of November he appeared considerably better, and continued so until the 20th, when he became as bad as ever. From this period his condition was variable—always more or less excited—rather petulant, if not irascible—scolding his gentlemen for slighting him. On the 29th of November he was removed to Kew, where were better opportunities for exercise. Through the month of December there was little, if any, change in his condition. During the first two or three weeks in January he became less irritable, was quite calm at times, and then would read and make sensible remarks on what he had read. From the latter part of the month he steadily improved. February 2nd, Miss Burney accidentally saw him walking in the garden, and, to avoid meeting, in compliance with the rules, ran off at full speed, and he after her, the physicians and attendants in

* Moore's Life of Sheridan, p. 360. Amer. edition.

full chase after him. She finally stopped until he came up, when he put his arms around her neck and kissed her. He talked incessantly, blurting out whatever came uppermost. "He seemed to have just such remains of flightiness as heated his imagination without deranging his reason, and robbed him of all control of his speech, though nearly in his perfect state of mind as to his opinions. * * He opened his whole heart to me, expounded all his sentiments, and acquainted me with all his intentions." He declared he was as well as he ever was, in his life—talked of the official situation of her father, of music, (when he undertook to sing,) and then of her friends. He said he was dissatisfied with his ministers, and showed a list of new ones he had prepared. On the 17th he received the Chancellor, on the 18th drank tea with the Queen, and on the 7th of March received the Address of the Lords and Commons in person.*

One of his first excursions was to a poor-house in the course of erection, of which he inspected every part, especially the rooms for lunatics, and expressed much satisfaction that such excellent accommodations were provided for persons labouring under the misfortune of insanity. During his convalescence, it is said, he passed much of his time in reading the debates on the Regency Bill.†

The King was attended, at first, by his own physicians, Sir George Baker and Dr. Warren, and they were, shortly after, joined by Sir Lucas Pepys, Drs. Reynolds, Gisborne, and Addington, of whom the latter alone had given any special attention to the treatment of insanity, and he discontinued his attendance after a few days. They had all achieved professional distinction, but Warren enjoyed an undisputed pre-eminence. He was not only at the head of his profession in London, and deservedly so, but such were his talents and manners that he associated intimately with the leading men of the day,—Burke, Fox, Sheridan, &c.—and was appointed physician to the Prince of Wales. The attack not readily yielding, it was thought proper by the Queen and the ministers, who had the direction of these matters, to have the constant attendance of some one particularly skilled in diseases of the mind. Their choice fell on the Rev. Dr. Francis Willis. This gentleman was educated for the established church, and took charge of a parish in Lincolnshire. Having some knowledge of medicine, he was fond of prescribing for the medical as well as the spiritual wants of his people, and especially for mental diseases. He was very soon regarded as very successful in this department of the healing art, and was so much resorted to, that he provided an

* Diary and Letters, ii. Phil., 1842.

† Wraxall's Posthumous Memoirs of his Own Time, p. 520. Phil.

establishment designed especially for the treatment of the insane. He was much patronized by the higher classes, and for fifty-eight years he had never less than thirty patients under his care. He was at this time seventy years old, but "seemed to be exempt from all the infirmities of old age, and his countenance, which was very interesting, blended intelligence with an expression of placid self-possession."* Miss Burney describes him as "a man of ten thousand, open, honest, dauntless, light-hearted, innocent and high-minded." He joined the corps of physicians on the 6th of December, and took up his quarters in the palace.† In the consultation which settled their respective functions, Willis was to have charge of all the domestic and strictly moral management—in accordance, however, with such general views as had been agreed upon. The medical treatment was arranged in the morning consultation, and it was understood that Willis was to take no decided measure, either medical or moral, not previously discussed and permitted. Pepys, Gisborne and Reynolds attended, in rotation, from four o'clock in the afternoon until eleven the next morning. Warren or Baker visited in the morning, saw the King, consulted with Willis and the physician who had remained over night, and agreed with them upon the bulletin for the day. Willis was soon joined by his son John, whose particular function seems not to have been very definitely settled. Willis professed to regard him as equal to himself in point of dignity and responsibility, but his colleagues considered him as merely an assistant to his father. Two surgeons and two apothecaries were also retained, each one, in turn, staying twenty-four hours in the palace. The personal service was rendered by three attendants, whom Willis had procured from his own establishment, and the King's pages,—one attendant and one page being constantly in his room.‡

* Wraxall, *ibid.* p. 447.

† Among the gossip of the court it was related that the "King asked Willis, when he entered the room, if he, who was a clergyman, was not ashamed of himself for exercising such a profession. 'Sir,' said Willis, 'our Saviour himself went about healing the sick.' 'Yes,' answered the King, 'but he had not 700*l.* a-year for it.'"—*Lord Malmesbury's Diaries, &c.*, iv. 317.

‡ The kind of supervision and attendance that was practised during this illness, and which was the same, probably, in the subsequent attacks, would seem sufficient to have prevented the slightest abuse of trust; and yet the King told Lord Eldon that, in one of his attacks, but which it does not appear, he was knocked down by a man in the employ of some of his physicians. "When I got up again," he added, "I said my foot had slipped and ascribed my fall to that; for it would not do for me to admit that the King had been knocked down by any one." [Twiss, i.—"Public and Private Life of Lord Chancellor Eldon."] We learn nothing further respecting this fact, and are left in doubt whether it actually occurred, or originated in that intellectual or moral obliquity, (almost universal among the insane, but the exact nature of which has never been thoroughly understood,) which leads them to exaggerate, distort, and pervert much that falls under their observation, and to fabricate much that never occurred at all. This curious trait of

The medical treatment seems to have consisted chiefly of "bark and saline medicines." An alterative pill, containing a little calomel, was given him once. Once, and once only, blisters were applied—to the legs—but they occasioned considerable irritation and restlessness.

It was determined that the moral management of the King required strict seclusion from his family and ministers, and, as far as possible, from all other company. But nothing can more strikingly indicate the change that has occurred since that time, in respect to one means of managing the insane, than the fact that, for two or three months, the King was frequently subjected to mechanical restraint. There was nothing, however, in his condition which would be considered at the present time a sufficient reason for its application. He was not disposed to injure his person or his clothing, his attendants or his furniture. In the King's case—and this, no doubt, was an example of the ordinary practice—it was evidently used by way of discipline, as a means of subduing turbulence and increasing self-control. Willis said, in his second examination by the Committee of the House of Commons, that when he took charge of the King, he was dissatisfied with the restraint which had been previously used, and for five days "endeavoured to persuade and explain," that some more efficient method would be resorted to, unless there was a "ready compliance" with his wishes. The King seems to have been insensible to this kind of intimidation, and the new mode of restraint was applied, with the effect, as Willis states, of accomplishing the desired purpose more effectively than before, being "more firm but not so teasing to the patient." It does not appear what means of restraint was used by Willis, or by the other physicians, but an incident related by Wraxall renders it probable that one of them was that time-honoured implement which is still associated with the popular idea of insanity. While walking through the palace, during his convalescence, accompanied by an equerry, they observed a strait-jacket lying in a chair. The equerry averting his look, as if to conceal some embarrassment, the King said: "You need not be afraid to look at it. Perhaps it is the best friend I ever had in my life."* This incident does not strengthen a favourite position of the advocates of non-restraint, that it leaves disagreeable impressions upon the patient's mind.

Of another fact respecting the King's treatment I cannot find a sufficient explanation. Between the 6th of December and the

mental pathology deserves to be closely studied, not only because it is curious, but because it will be found, I think, to have some important bearing on human veracity, and human testimony in the normal state.

* Posthumous Memoirs, &c., p. 520.

13th of January he went out of doors but twice, and for a month previous not at all. Considering the form of the disorder and the facilities for exercise which the grounds afforded, this is certainly surprising. On one occasion, when the King had been promised a walk, Dr. Warren revoked the promise, because, as the day was cold, and the King had perspired freely in the night, there would be some risk of his taking cold.*

The political consequences of the King's illness proved to be of the deepest interest, whether we regard the magnitude of the questions at issue, or the men by whom they were discussed. The array of talent which distinguished the parliament of that period has never been equalled before or since. The interests of the administration were supported by Pitt, Thurlow and Wilberforce, while the forces of the opposition were led by Fox, Burke, Sheridan, Windham, Grey, Loughborough, and North. During the two or three months that the struggle lasted, every weapon of argument, wit, ridicule and invective was used by the contending parties with a dexterity and vigour which such men only could display.

When the King's incapacity was announced, parliament immediately set about to provide a regency. All parties agreed that the Prince of Wales should be the Regent, but differed very widely as to the exact amount of authority and privilege he should receive. The Whigs contended that he should exercise all the functions of the Sovereign precisely as if there was a demise in the Crown. The ministers, on the other hand, were determined to hamper the Regent with limitations and restrictions which would have shorn the regal office of much of its dignity and power. The real question at issue, therefore, was, which of the two parties that divided the country should possess the administration, and hence the violent party-spirit which characterized all the political proceedings of the time. The first step was to ascertain officially the exact condition of the King, and, accordingly, each House appointed a committee to examine his physicians. These committees performed the duties assigned them on the 10th of December, and their reports were laid upon the table a few days afterward.

To each physician was put the following questions: "Is his Majesty incapable, by reason of the present state of his health, of coming to parliament, or of attending to public business? What hopes have you of his recovery? Is your answer to this question founded upon the particular symptoms of his Majesty's case, or your experience of the disorder in general? Can you form any judgment or probable conjecture of the time his Majesty's illness is to last? Can you assign any cause for his illness? Do

* It appears that on that night the restraint had not been removed at all.

you see any signs of convalescence?" The replies to these questions evince a knowledge of insanity quite creditable to men not expressly devoted to this branch of the science—one that would hardly be expected by us who witness so frequently the remarkable discrepancies of opinion that characterize the reports of medical commissions, albeit they may include men whose names are not entirely unknown to fame. The replies also evince a certain kind of discretion and reserve worthy of all imitation on the part of those who are called upon for professional opinions. Few medical witnesses succeed, as most of these gentlemen did, in hitting that happy medium between saying too much and saying too little. They all expressed strong hopes of the King's recovery, because the majority of patients actually do recover, and they saw nothing particularly unfavourable in his case. None of them saw any signs of convalescence, and, with one exception, none of them pretended to assign causes or limits to his disorder. Willis said he would recover within a few months, and thought the attack was produced by "weighty business, severe exercise, too great abstemiousness, and little rest." The other physicians were as well aware as Willis, no doubt, of these facts in the history and habits of the King, and possessed better opportunities than he had of knowing how far they had affected his mind, but refrained from assigning them as causes of the disorder. Willis's opinion, though confidently uttered, was merely a speculation, resting on no very substantial grounds. The King's business had not been weightier than usual, and though fond of exercise, there is no evidence that he carried it to a degree incompatible with its proper object, the promotion of health. His abstemiousness consisted merely in avoiding that excessive indulgence in the pleasures of the table which was common among the higher classes of that period, and was practised by him for the purpose of warding off disease. The want of sleep was probably one of the effects rather than a cause of his mental affection. Whether the committee were satisfied with Willis's theory does not appear; but most of them probably were, like the rest of the world, curious to learn the cause of the attack, but readily satisfied with elaborate phrases and dogmatic assertions.* Sheridan, however, saw in it a fair mark for his wit, and he was not the man to neglect an opportunity of that kind. Willis had stated, in proof of the correctness of his opinion, that the medicine which had been given to his Majesty

* Just previous to the attack, an eruption on the legs, of some duration, had suddenly disappeared. This incident, considered in connexion with a similar one in the first attack, may be fairly regarded as a more efficient exciting cause than any one of those mentioned by Willis, and yet he overlooked it altogether.—*Adolphus' Hist. of England*, i. 75.

ever since Sunday morning, in order to meet and counteract those causes, had had as much effect as he could wish, and "his Majesty had certainly been gradually better from the first six hours of his taking it." The orator said that, when he heard Dr. Willis assert that his physic could, in one day, "overcome the effects of seven-and-twenty years' hard exercise, seven-and-twenty years' study, and seven-and-twenty years' abstinence, it was impossible for him to keep the gravity fit for the subject. Such assertions put him in mind of those nostrums that cure this and that, and also disappointments in love and long sea-voyages."*†

The policy of the cabinet was to make it appear that the King's illness would be of short duration, and let it be implied; as an obvious consequence, that the measure of appointing a Regent should not be precipitated. On the other hand, the policy of the Whigs was to represent the disorder as incurable, or, at least, of very uncertain duration, and therefore that the sooner the Regency was established the better for the country. In this view they received but feeble support, certainly, from the examination of the physicians; but Warren, who was high in the councils of the Whig party, had privately encouraged the idea that the King would never recover. True, in his examination just referred to, and also in the examination on the 7th of January, he expressed as much confidence as the others in his ultimate recovery. The fact furnishes a striking illustration of the distorted influence of party-spirit, even upon the views of scientific men on scientific subjects. Willis, who always professed to be quite sure of the King's recovery, and was equally high in the estimation of the other party, inspired the administration with confidence in the policy they had adopted. Every occurrence at Kew was whispered about in political circles, before it was many hours old, coloured and exaggerated, of course, by the prevalent hopes and fears. The names of Warren and Willis became as familiar as household words, and even served as rallying points for the two great parties that divided the country. In less than a month from the first examination, both parties were equally ready for another, and equally confident of deriving political capital from the result. For this purpose the Commons appointed a select committee, which commenced its sittings on the 7th of January, and made their report, 400 folio pages long, on the 14th.‡ The same questions as

* The Par. Debates on the Regency are contained in the 27th vol. of Hansard.

† The fact that the medicine referred to—which was simply Peruvian bark—was determined upon in the consultation of the whole corps of the King's physicians, and that no other observed any improvement in his condition, gives additional pungency to the ridicule, while the whole incident throws much light on Willis's character.

‡ The Report of the first examination may be found in the Parliamentary Debates

before were put to the physicians, and were followed by the same replies, except that Willis, when asked if he had observed any signs of convalescence, replied affirmatively. The greater part of the examination was directed to matters having only an incidental connexion with the King's condition,—the communications sent from Kew to the ministers and other leading characters, the domestic arrangements of the palace, the dissensions of the physicians, the merits and proceedings of the Willises,—to anything, indeed, calculated to strengthen one side or weaken the other. Upon the signs of recovery or convalescence the examination was particularly searching, because, more than anything else, they determined the political movements of the day. Willis, when asked if he saw any present signs of convalescence, replied: "About a fortnight ago, his Majesty would take up books and could not read a line of them; he will now read several pages together, and make, in my opinion, very good remarks upon the subject. I think, in the main, his Majesty does everything in a more rational way than he did, and some things extremely rational." (This trait had been observed for the last five or six days, the books having been selected by the King, and read aloud.) To the same purpose, he also stated that his patient was less frequently and less intensely excited, and less frequently required restraint. Beyond the simple acknowledgment that he was more quiet, the other physicians were not supposed to go in regard to the signs of convalescence. They denied that he had appeared rational, even for a moment; but none of them had happened to see the King reading, and they were not disposed to take any fact of Willis's observing as a ground for their opinions. His constant attendance gave him an advantage over his colleagues, for it enabled him to see for himself much that they would never know at all, or only at second-hand; and such observations, we are all very well aware, sometimes leave a stronger impression on the mind than the most definite and tangible facts communicated by others.

Willis's character, conduct, and practices were subjected to a very searching scrutiny, not more for the purpose of obtaining information than of torturing every incident into matter of censure against himself or his employers. It cannot be denied that he gave his adversaries abundant opportunities of this kind; for, with all his experience, and the frost of seventy years on his head, he had not a philosophical turn of mind, nor the power of concealing his deficiency by a prudent reserve. He had stated

and Annual Registers of the time, but not so this, which long eluded my search, until found in a collection of pamphlets, entitled, "History of the Regency," published by Stockdale, and brought to my notice by the librarian of Brown University, Mr. Guild. From this Report chiefly I have obtained all that seemed worth preserving respecting the management of the King.

that nine out of ten of his patients recovered under his hands, but he was unable to tell how many he had received or how many he had cured. When further pressed, he said that the ground of his calculation was the fact that his first fifteen patients were cured, and that, subsequently, several instances occurred of ten going away together radically cured! The declaration of his colleagues respecting this alleged success—that it required other evidence than his bare assertion—was not calculated to restore the harmony which had been so thoroughly disturbed. He was obviously very restive under the unusual restrictions imposed upon him. To be associated on equal terms with some half-dozen other physicians, equal to himself in professional eminence, and more than his equals in general culture, he found a very different position from that of controlling an establishment where his simple word was law. He felt—very correctly, no doubt—that a great obstacle to the King's recovery consisted in his being obliged to see so many different persons, under circumstances calculated to excite strong emotion. He was actually disturbed, and sometimes even prevented from sleeping, by the visits of so many medical men—never less than half-a-dozen every day—and, accordingly, Willis, "thinking it his duty," as he says, "to do for his Majesty what he should do for any private gentleman," put up a written notice that no person should be admitted into his Majesty's rooms without permission of himself or son. For this order, which was more easily given than enforced, for none of his colleagues seem to have regarded it, he was severely handled by the committee, who endeavoured to make it appear like an attempt on his part, and that of the Lord Chancellor, whose sanction he pleaded, to conceal, in some degree, the King's real condition.

Another obstacle to the King's recovery, apprehended by Willis, seems rather fanciful than real. "When his Majesty," he says, "reflects upon an illness of this kind, it may depress his spirits and retard his cure more than a common person;" but, subsequently, he states, that "this apprehension is somewhat relieved by his knowledge of the King's sense of religion, which may lead him, with a proper resignation, to reflect on what it had pleased God to afflict him with."

The want of good faith was broadly charged upon Willis by his colleagues, and in the examination there came out one instance of it which has obtained a popular celebrity. Warren stated, that, on the day Willis arrived, it was agreed, in general consultation, "that quiet of body and mind were to be endeavoured to be obtained by every means possible; and that everything should be kept from his Majesty that was likely to excite any emotion; that though his Majesty had not shown any signs

of an intention to injure himself, yet that it was absolutely necessary, considering the sudden impulses to which his distemper subjects people, to put everything out of the way that could do any mischief." The very next day, however, he put into the King's hand a razor and a penknife. "I asked him," says Warren, "how he could venture to do such a thing. He said he shuddered at what he had done." Willis said, in explanation, that the King "had not been shaved for a long while, perhaps a fortnight or three weeks; and the person that had been used to shave him could not complete the parts of his upper and under lips; and being confident, from the professions and humour of his Majesty at that moment, I suffered his Majesty to shave his lips himself; and then he desired he might have his whole face lathered, that he might just run over it with a razor; and he did so in a very calm manner. His nails also wanted cutting very much; and, upon his assurance, and upon my confidence in his looks, I suffered him to cut his own nails with a penknife, while I stood by him. It is necessary for a physician, especially in such cases, to be able to judge, at the moment, whether he can confide in the professions of his patient; and I was never disappointed in my opinion whether the professions of the patient were to be relied on or no." He denied that he said to Warren, he shuddered at what he had done, and also denied that, in regard to such matters, he ever agreed not to be governed solely by his own discretion. After professing such views, he found it a little inconvenient to answer the question, why he never afterwards repeated this indulgence. He replied, however, that it had a bad moral effect, his Majesty taking it ill that he was not allowed other privileges, such as going up stairs to see his family, and doing other imprudent things. "Do you think," asked the committee, "that the expectation of the liberties which the King might call for would be of more danger to him than the use of razors and penknives?" "To be sure," was the reply, "because refusal would irritate him much and increase his disorder." "Whether," continues the committee, "you refuse to the King all indulgences which may be safely given, lest he should demand those that ought to be refused?" "I do a great many," said Willis. Those, certainly, were very embarrassing questions.

This incident furnished Burke with the materials of a violent diatribe against the ministers, who, he said, had committed his Majesty to the care of a man in whose hands he was not safe for a moment.*

* There is a traditionary anecdote connected with this razor scene, strongly illustrative, if true, of Willis's character. Burke asked him, it is said, what he would have done, if the King had suddenly become violent while these instruments were in his hand. Having placed the candles between them, he replied, "There, sir,

It also came out that, within five days after he took charge of the King, Willis allowed him to have an interview with his daughters, and another with the Queen, without the consent or knowledge of his colleagues, and contrary, as they alleged, to the terms of their agreement. In defence of his course, he said, "I am sure that such occurrences can scarce be too frequent, as it comforts the patient to think that he is with his family, and that they are affectionate to him; and upon inquiry of patients who have been cured of the same indisposition, they have always mentioned those occurrences having given them the greatest comfort, and, as they thought, helped very much towards their recovery. . . . The irritation occasioned by a patient's seeing his friends or relations is entirely overbalanced by the softening him into tears, which ever leads to amendment." In this statement of Willis, we may recognise the views of one of our early associates, the first President of this Society, between whom and Willis this was not the only point of resemblance.

Another incident in Willis's management, which had greatly scandalized his colleagues, was deemed worthy of the notice of the committee. It was the allowing his Majesty to read the tragedy of *Lear*. It seems he refused the King's request to have it, though too crazy, he thought, to be affected by it, one way or the other; but allowed him to have a volume of plays, which happened, without his knowledge, to contain *Lear*.*

In the practical knowledge of insanity, and the management of the insane, Willis was unquestionably in advance of his associates; but following the bent of his dictatorial habits, he often spoke without measuring his words, and often overstepped the limits of professional etiquette. Hence he suffered under the severe handling of the committee, to whom he presented a good

by the EYE! I should have looked at him *thus*, sir—thus!" whereupon Burke instantaneously averted his head and made no reply. This must have occurred, if at all, in the committee-room, but no mention of it is made in the printed report. It may have been expunged, however, by the committee. What the common practice is, I am unable to say; but that such a thing is sometimes done, we have the authority of Sir Samuel Romilly for believing. He states that some of the testimony of the physicians, in 1810, to the effect that the cause of the King's illness in 1801 was the resignation of Pitt, and the cause of the attack in 1804 was the publication of the correspondence between the Prince of Wales and the Duke of York, was suppressed. ["*Memoirs*," &c., ii, 165.] The authority for this anecdote is Reynolds, the playwright, who says he had it from Willis himself. ["*Life*," &c., ii, 15.] Among the gossip of the day was a similar story respecting the effect of Willis's tone on Sheridan when about to examine him. "'Pray, sir, before you begin,' said Willis, 'be so good as to snuff the candles, that we may see clear, for I always like to see the face of the man I am speaking to?'" Sheridan was so confounded at this speech of the basilisk Doctor, that he could not get on in his examination, and for once in his life he was posed."—*Swinburne's Courts of Europe*, ii, 75.

* Willis's statement that he had never read this play, is not calculated to raise our estimate of his general culture.

many vulnerable points of attack. It is obvious, in fact, that Willis was a bit of a charlatan, and not always above the arts of that character. Sheridan remarked, in one of his speeches, that Willis professed to have the gift of seeing the heart by looking at the countenance; and added, looking at Pitt, that the declaration seemed to alarm the right hon. gentleman.*

But, with all these imperfections, it cannot be denied that Willis evinced much practical sagacity in his views of the nature and management of mental disease, and a sturdy independence and self-reliance which, while they are always elements in a great character, were in him, under the circumstances, little less than wonderful. Let those who are emulous of his success strive to imitate him in these qualities, rather than in his dogmatism and disregard of professional observances.

The report of the committee was a fruitful topic in the subsequent debates in parliament, furnishing fresh materials for declamation and intrigue. On no other occasion, probably, were the prominent qualities of the celebrated men who figured at that period more strikingly exhibited. Night after night, for weeks together, witnessed the unrivalled self-possession of Pitt—the clear, close, vehement argumentation of Fox—the irresistible wit of Sheridan—the multifarious knowledge and riotous fancy of Burke. But the prize, which seemed to be almost within the grasp of the Whigs, rapidly receded from their view. Towards the last of January the King had unquestionably improved, and on the 25th of February Warren signed a report declaring him “free from complaint.”

The question of recovery was also embarrassing, for although it might be obvious enough to the family and friends, yet it was not so easy to establish it satisfactorily to the country. An apparent recovery is not always a real one. Often, after a person seems to have regained his natural feelings and views, and has recognised his mental disorder, and is preparing, perhaps, to resume his customary pursuits, he again passes under the cloud, and, to all appearance, is as far from sanity as ever. Burke was as ready for this as for any other occasion, and his remarks upon it exhibited his wonderful faculty of acquiring and appropriating every description of knowledge. “The disorder,” said he, “with which his Majesty was afflicted, was like a vast sea which rolled in, and at low tide rolled back and left a bold and barren shore. He had taken pains,” he continued, “to make himself master of the subject, he had turned over every book upon it, and had visited the dreadful mansions where

* There is nothing of this kind in the report of the committee, but it may have been suppressed. Sheridan would hardly have invented the fact, and then called on Pitt to witness its truth.

those unfortunate beings were confined. . . . An author of great authority having mentioned the uncertainty of the symptoms of sanity, had declared, that after having been kept a month, (and the rule was at all the houses he had visited, though anxious to discharge the patients speedily, as they all were, to keep them a month after their recovery before they turned them out of the house,) they would sometimes dread the day of their departure, and relapse on the very last day. . . . He drew a picture of the King's supposed return, which he described as most happy, if really cured; but as horrible in the extreme, in its consequences, if a sudden relapse took place."

The only effect of the King's alleged convalescence was to suspend all parliamentary proceedings relative to a regency, while, quietly and without opposition, he resumed, one after another, his regal functions.*

* It may be a matter of surprise, at first sight, that, considering the disagreement between Willis and his colleagues respecting the signs of convalescence, some other physician of eminence in this branch of the art was not called in. "Why," said Burke, "is not the keeper of one mad-house confronted with the keeper of another?" referring to Monro, who then visited Bethlehem. It is probable, however, that the Government suspected—very justly too—that the measure, while it would certainly introduce a new element of discord into the medical councils, might not so surely strengthen their position.

Willis was rewarded by parliament with a pension of 1500*l.* for twenty-one years. He was shortly after employed to treat the Queen of Portugal, but she proved to be incurable. For this service he received 20,000*l.* These fees are without a parallel in the records of the medical profession. Dr. John Willis received for his services 650*l.* per year during his life.

It is somewhat calculated to abate our confidence in history, to find that so recent and public a fact as the result of Willis's treatment of this case should be related in such a contradictory manner. By many, if not the most of those who refer to it, including even such respectable authorities as the "Biographie Universelle" and "Penny Cyclopædia," it is represented to have been a complete cure. But the truth is—and obvious enough, too, it might seem—the poor Queen, who had been for some time hovering on the verge of insanity, became unequivocally deranged in 1792, and so continued without any improvement. In the early stage of her disease, she conceived the idea that she was doomed to eternal perdition. Her son, the Prince of Brazil, assumed the regency in 1792. In 1807, when the kingdom was invaded by the French, she followed the fortunes of her house across the ocean, though much against her will, and finally died in 1816, aged eighty-one.

In Frederick Reynolds's "Life and Times" I find a notice of Willis's establishment, which seems to be worth copying:—"Gretford and its vicinity at that time exhibited one of the most peculiar and singular sights I ever witnessed. As the unprepared traveller approached the town, he was astonished to find almost all the surrounding plowmen, gardeners, threshers, thatchers, and other labourers, attired in black coats, white waistcoats, black silk breeches and stockings, and the head of each '*bien poudré, frisé et arrangé*.' These were the Doctor's patients; and dress, neatness of person, and exercise being the principal features of his admirable system, health and cheerfulness conjoined to aid the recovery of every person attached to that most valuable asylum. The Doctor kept an excellent table, and the day I dined with him I found a numerous company. Amongst others of his patients, in a state of convalescence, present on this occasion, were a Mrs. B., a lady of large fortune, who had lately recovered under the Doctor's care, but declined returning into the world, from the dread of a relapse; and a young clergyman, who occasionally read service and preached for the Doctor. Nothing occurred out of the common way till soon after the cloth was removed, when I saw the Doctor frown

His Majesty's third attack began about the 22nd of February, 1801, and though supposed by the public to have recovered within three or four weeks, it is certain that he was not fully restored until the last of June. He was attended by Drs. Gisborne, Reynolds, Pepys, Robert Darling Willis, John Willis, and Thomas Willis.* The early stage of the disease was much like that of 1788, except in being of shorter duration. After the first week or two, he could, for the most part, control his morbid manifestations to such a degree, that, to them who saw him only occasionally, he seemed to be less under the influence of disease than he really was. Indeed, as early as the 7th of March, it was commonly reported, and commonly believed, that he had completely recovered, though on the 4th Reynolds had stated that "much time would be necessary to complete the cure."† The bulletins ceased on the 12th of March, when Reynolds ceased his attendance; but on the 14th or 15th of the same month he had a "severe paroxysm," as it was called, which, however, must have soon abated, as he transacted business on the 17th. He continued under medical care until the end of June, appearing very well whenever circumstances required the exercise of self-control, but constantly exciting the apprehensions of his family and physicians by some manifestation of mental disturbance. John Willis, writing to Lord Eldon, May 16th, intimates that "artificial prudence" is still absolutely necessary, and informs him that his conversations with the King have not been of much service. "He seems," he continues, "rather to select and turn any part to his purpose than to his good."‡ Five days after, Addington writes to Lord Eldon, that "during a quiet conversation of an hour and a half, there was not a sentiment, a word, a look, or a gesture, that I could have wished different from what it was; and yet my apprehensions, I must own to you, predominate. The wheel is likely to turn with increasing velocity, (as I cannot help fearing,) and if so, it will very soon become unmanageable."§ Four days after, one of the Willises writes, that the King "is in a perfectly composed and quiet state. He told me, with great seeming satisfaction, that he had had a most charming night—'but one sleep from eleven to half-past four;' when, alas! he had but three hours' sleep in the night, which, upon the whole, was passed in restlessness, in getting out of bed, opening the shutters, in praying at times

at a patient, who immediately hastened from the room, taking with him my *tail*, which he had slyly cut off."

* Robert and John Willis were sons of Francis, and probably Thomas also, but of this I am not quite certain.

† Diaries of Lord Malmesbury, iv. 28.

‡ Twiss—Public and Private Life of Lord Chancellor Eldon, i. 204.

§ Ibid. i. 205.

violently. . . . He frequently called, 'I am now perfectly well, and my queen, my queen has saved me.' The King has sworn he will never forgive her if she relates anything that passes in the night."* June 9th, one of the royal family writes to Thomas Willis, "He has been very quiet, very heavy, and very sleepy. . . . God grant that his eyes may soon open, and that he may see his real and true friends in their true colours." Three days after, she again writes, that "the sleepiness continues to a great degree. I am told the night has been tolerable, but he has got up in his usual way, which is very vexatious."† Four days after, one of the Willises writes: "His Majesty rode out this morning at ten o'clock, and did not return till four. He paid a visit in the course of the day to Mr. Dundas. His attendants thought him much hurried, and so did his pages. He has a great thirst upon him, and his family are in great fear. His Majesty still talks much of his prudence, but he shows none. His body, mind, and tongue are all upon the stretch every minute; and the manner in which he is now expending money in various ways, which is so unlike him when well, all evince that he is not so right as he should be."‡

A considerable change seems to have occurred within a few days of the date of this letter, since his physicians were discharged, and we hear no more of his disorder. He was strongly averse to having the Willises any longer about him, though, as he says, "he respected the character and conduct of Robert Willis." "No one," he says, "who has had a nervous fever can bear to continue the physicians employed on the occasion.§

During the first three weeks of the attack there was actually a suspension of the royal functions, and with it a suspension of some political arrangements of the highest importance. Pitt had resigned, but there was no one to receive his resignation, or sign the commission of his successor; so that it would have been difficult to answer the question, who is now prime minister? Pitt and his friends continued to perform the necessary routine duties of their offices, and Mr. Addington held constant communication with the palace.|| This change of ministry, which was exceedingly distasteful to the King, was regarded by some as the exciting cause of this attack; but it is probable that the differences between the Prince of Wales and his wife had also much

* Twiss, i. 205.

† Ibid. i. 206.

‡ Ibid. i. 208.

§ The only thing respecting the medical treatment in this attack which has rewarded my inquiries is, that the prime minister, Mr. Addington, one day, recommended a hop pillow for procuring sleep, which proved perfectly successful. "In this attack sleep always calmed and quieted the King, while in that of 1788 he would awake from a long sleep more turbulent than ever."—*Malmesbury's Diaries*, iv. 46.

|| Life, &c., of Lord Sidmouth, by Pellew, i. 309.

to do with it. It was ushered in by a violent cold, which he contracted by remaining long in church on the 13th—a chilly, snowy day.

Again, on the 12th of February, 1804, the King manifested unequivocal signs of mental disease, occasioned, it was thought, by the publication of certain correspondence between the Prince of Wales and the Duke of York, and immediately preceded by a cold and a consequent fit of the gout. This attack continued longer than the last, but, like that, was much less severe than the attack of '88. He was attended by Sir Lucas Pepys, Dr. Reynolds, Dr. Heberden, and Dr. Simmons, physician of St. Luke's,* and was in the particular charge of the latter, who resided in the palace. The few scanty notices I have been able to find convey but little information respecting the character or progress of this attack. About the 25th of February it was generally understood that the King was improving; but in the bulletin of the 26th, it was stated that his speedy recovery could not be expected.† We learn that, on the 9th of March, Lord Eldon walked with him around the garden, when he observed, as he says, "at first, a momentary hurry and incoherence in his Majesty's talk, but this did not endure two minutes; during the rest of the walk there was not the slightest aberration in his Majesty's conversation, and he gave me the history of every administration in his reign."‡ On the 23rd of April, he presided at a council. On the 2nd of May, Addington walked with him in the garden, and thought him perfectly well.§ Five days after, Pitt conversed with him three hours, and was "amazed at his cool and collected manner."|| May 25th, the Duke of York writes that the King seems to dwell much upon the illegality of his confinement; and the next day, Pitt, in a note to Eldon, expresses some alarm in reference to a conversation in one of the audiences two days before. "The topics treated of were such as did not at all arise out of any view (right or wrong) of the *actual state* of things, but referred to plans of foreign politics,

* Why none of the Willises were employed on this occasion does not appear. It was probably, however, for the same reason that was alleged for their not being employed in the next attack—viz., the Queen's apprehension that their presence would excite unpleasant associations in the King's mind. In fact, the King conceived a strong dislike for the Willises; but it seems to have been a common impression at court, [Malmesbury, iv. 316,] that they managed him much better than Simmons.

† Bulletins must necessarily be brief, and very general in their terms, and therefore not calculated to convey very accurate information; but those which were issued by the physicians during this illness often indicate much confusion of ideas, and an uncertain, vacillating prognosis, which did not escape the notice nor the censure of parliament. For instance, the very next day after the bulletin above mentioned, the bulletin said, "He is still better than he was yesterday, and gradually approaching recovery."

‡ Twiss, i. 228. § Life of Sidmouth, i. 313. || Malmesbury, iv. 306.

that could only be creatures of an imagination heated and disordered.”*

His conduct at this period, as described by one of his court, indicates a phasis of insanity which, though common enough, is apt to be greatly misunderstood by people not professionally acquainted with the subject. “Mrs. Harcourt confirms all that Lady Uxbridge had told me—that the King was apparently quite well when speaking to his ministers, or to those who kept him in a little awe; but that towards his family and dependents his language was incoherent and harsh, quite unlike his usual character. She said Simmons did not possess, in any degree, the talents required to lead the mind from wandering to steadiness;—that, in the King’s two former illnesses, this had been most ably managed by the Willises, who had this faculty in a wonderful degree, and were men of the world, who saw ministers, and knew what the King ought to do;—that the not suffering them to be called in was an unpardonable proof of folly (not to say worse) in Addington; and now it was impossible, since the King’s aversion for them was rooted;—that Pitt judged ill in leaving the sole disposal of the household to the King;—that this sort of power, in his present weak, and, of course, suspicious state of mind, had been exercised by him most improperly: he had dismissed and turned away, and made capricious changes everywhere, from the Lord Chamberlain to the grooms and footmen; he had turned away the Queen’s favourite coachman, made footmen grooms, and *vice versa*, and what was still worse, because more notorious, had removed lords of the bedchamber without a shadow of reason;—that all this afflicted the royal family beyond measure; the Queen was ill and *cross*—the Princesses low, depressed, and quite sinking under it;—and that, unless means could be found to place some very strong-minded and temperate person about the King, he would either commit some extravagance, or would, by violent exercise and carelessness, injure his health, and bring on a deadly illness. . . . She said that Smart, when alive, had *some* authority over him;—that John Willis also had acquired it, but in a different way: the first obtained it from regard and high opinion, the other from fear;—that, as was always the case, cunning and art kept pace, in the King’s character, with his suspicion and misgivings, and that he was become so very acute that nothing escaped him.”†

The general impression at the time was, that, in both these attacks, the King was deprived of his reason for a short period only; and parliament was readily satisfied by the declarations of ministers, that there was no necessary suspension of the royal functions. Before the question of a regency could be fairly

* Twiss, i. 244. † Malmesbury, iv. 326.

started, the bulletins ceased, and he was supposed to have recovered. Of course, there was no examination of the physicians, and the public had no means of learning the subsequent progress of the disorder, because they alone to whom the facts were known were most interested in keeping them to themselves. It was not until the examination of the physicians, relative to the next attack (1810), some of whom had also attended him in 1801 and 1804, that the true state of the case was revealed.* It then came out for the first time, that both these attacks were of much longer duration and greater severity than the public had been led to suppose,—that, about the middle of March, 1801, and after the bulletins ceased, a relapse took place,—that, in 1804, Dr. Simmons continued in the palace as late as June,—and that either Heberden or Sir Francis Millman attended the King up to October.† And yet it had become a matter of history, that during those very periods when his Majesty was in charge of medical men on account of mental disorder, he was exercising the highest functions of sovereignty. On the 17th of March, 1801—which, as we have just seen, was only two or three days subsequent to the date of a “severe paroxysm”—measures of vital interest and importance to the country received his assent and concurrence. On the 14th of April, Pitt’s resignation was accepted, and the new ministers received their commission. On the 9th of March, 1804, a commission, under the King’s sign-manual, was passed, by virtue of which fifteen bills received the royal assent, and, on the 23rd, his assent was given to many other bills.

It is not surprising that the discovery of his real mental condition, half a dozen years afterwards, excited both astonishment and indignation. In parliament, the conduct of Lord Eldon, who, in consequence of his office as Lord Chancellor, and of his intimate personal relations to the King, was held responsible for these transactions, was condemned in the strongest terms. Earl Grey charged him with having done what was equivalent to treason. “What,” said he, “would be the character, what the appropriate punishment of his offence, who, knowing his Sovereign to be actually at the time incompetent,—who, in the full conviction of his notorious and avowed incapacity, and whilst he was under medical care and personal restraint, should

* It must be borne in mind that the memoranda showing the progress of the disease, which we have given, were mostly published only a few years ago, so that, in fact, the whole state of the case was not generally known even after the examination of the physicians in 1811.

† Indeed, as late as December, the King had not entirely regained the confidence of his family. Lord Malmesbury says, (iv. 344,) on the authority of one of the court, “The Queen will never receive the King without one of the Princesses being present,—never says, in reply a word,—piques herself on this discreet silence,—and, when in London, locks the door of her *white room* (her boudoir) against him.”

come here, and in the name and under the pretext of his Majesty's commands, put the royal seal to acts which could not be legal without his Majesty's full and complete acquiescence?" . . . "I will ask the noble lord," he continued, in another part of his speech, "what he would have done, had a case of a similar nature come before him in Chancery? I will suppose such a case; and that, in the interval, when it appeared from the testimony of physicians that the unfortunate individual was incapable of exercising his mental faculties, a person had prevailed on an attorney to make a will for him; would the noble lord have given his sanction to such a proceeding? Would he have taken the opinion of the interested individuals, in preference to that of the physician? Let the noble lord apply this case to himself. I say that his Majesty's name has been abused. The noble lord has said, on his own authority, that his Majesty was not then incapacitated from acting; but will your lordships allow yourselves to believe that his Majesty's health was then such as to admit him to act in his royal incapacity, upon an authority which contradicts that of his physicians?"

In his defence, Lord Eldon declared, that on the 27th of February, and again on the 9th of March, 1804, the King's physicians had pronounced him competent to perform a certain act; or, as the matter was described more particularly in his Memoirs, he inquired of the physicians if, in their opinion, the King was competent to sign an instrument, provided he, Lord Eldon, had satisfied himself that the King understood its effect. To this query Sir Lucas Pepys and Dr. Simmons replied affirmatively, the other physicians being supposed to concur. Chiefly, however, he grounded his defence on the right to judge for himself respecting the King's mental condition, irrespective of medical opinions. "I have been significantly asked," said he, "if I would supersede a commission of lunacy against the opinion of physicians. I have often done so. The opinions of physicians, though entitled to great attention, were not to bind him absolutely. . . . It was most important to the Sovereign that the Chancellor should not depend wholly on the evidence of the physicians, if he himself thought the King perfectly competent to discharge the functions of the royal authority."* In a letter to Percival, he declares that if the King had been found to understand the nature of the act he was asked to perform, he should have been bound by his sense of right and duty to have sanctioned such act, though he might have believed, with his physicians, that some delusions might occur an hour afterwards.†

Eldon declared, in the debate, that, on the 9th of March,

* Stockdale's Parliamentary Register, 1811, i.

† Twiss, i. 356.

1804, the King understood the duty he had to perform better than he did himself, and among his papers was found what he regarded as a conclusive proof of his opinion. "On applying to the King," he says, "to obtain his sign-manual to several bills, he, Eldon, began to read an abstract of the bills with more of detail than usual, when the King said, 'My lord, you are cautious.' He, Eldon, begged it might be so, under existing circumstances. 'Oh!' said the King, 'you are certainly right in that; but you should be correct as well as cautious.' Eldon replied, he was not conscious that he was incorrect. 'No,' said he, 'you are not; for if you will look into the commission you have brought me to sign, you will see that I there state that I have fully considered the bills proposed to receive my sign-manual. To be correct, therefore, I should have the *bills* to peruse and consider.' I stated to him that he had never had the bills whilst I had been chancellor, and that I did not know that he had *ever* had the bills. He said, during a part of his reign, he had always had them until Lord Thurlow had ceased to bring them; and the expression his Majesty used was, Lord Thurlow said it was nonsense his giving himself the trouble to read them."*

Lord Eldon, as well as the physicians, made the common mistake of confounding the power to understand the exact terms of a transaction, with that of perceiving all its relations and consequences. Such a mistake, natural enough as it might have been to him, could hardly have been expected from the physicians, especially under circumstances so peculiar and important. It would be considered a bold assertion, that a person regarded by his family and physicians as insane was perfectly competent to make a contract or execute a will; but to declare that the King, who, by their own admission, was more or less insane, was, nevertheless, competent to exercise the most important functions of his office, was, to say the least of it, to assume a tremendous responsibility. But they knew very well the wishes of the Court on the subject; and it could hardly have been expected of Court physicians that they would be over-scrupulous on such an occasion, especially as they were aware, no doubt, that the measures in question were proper enough in themselves, and the royal assent was merely a matter of form. This, unquestionably, was the real ground on which Eldon acted, though it did not furnish the kind of defence exactly which he was disposed to set up. The nation was at war; a change of ministry was in progress, both in 1801 and in 1804; a project of a regency would have distracted the national councils and impaired the national vigour; and the disease, scarcely severe at any time, seemed likely to be of very short duration. A man

* Ibid. i. 226.

much less devoted to political ends than Eldon might, under such circumstances, have considered it perfectly justifiable to avoid the real evils of a regency question by committing one more theoretical than practical, and followed by salutary consequences. In fact, the same thing was done by Lord Loughborough, who went to his Majesty on the 24th of February, 1801—Addington having declined the service—and obtained his signature to a commission for giving the royal assent to the Brown Bread Bill.*

There was another charge against Lord Eldon, which cannot be so easily parried. It was insinuated by Earl Grey, in the debate already alluded to, that he used the facilities of his position to prevent a junction between Fox and Pitt in 1804; and it appears, from his own papers, that he used similar means to accomplish the removal of Addington, his own colleague, and bring in Pitt. These might have been precisely the arrangements which the King would have favoured, had his mind been perfectly sound; but no man could have promoted them as Eldon did, without forfeiting every claim to upright and honourable conduct.†

About the 25th of October, 1810, the King was again, and for the last time, smitten by mental disease, consequent, it was generally supposed, upon the fatal illness of a favourite daughter. It began, like the former attacks, with unusual hurry and restlessness of manner, which, within a few days, passed into a paroxysm of high excitement, accompanied by much fever. During the first few months the disorder was characterized by paroxysms of this kind—in one of which he is said to have been “unconscious of surrounding objects”—alternating with intervals, when the King was free from fever, calm, composed, and quite rational in his conversation. He was attended by Reynolds, Heberden, Baillie, Halford, and Robert Willis, the latter residing in the palace and having the immediate custody of the King, as his father had in 1788. The physicians were examined by a committee of the Commons on the 14th of December, and by a committee of the Lords about the same time. The questions propounded were precisely the same as those of 1788, and the replies were of a very similar character. They all concurred in the opinion that the disease would ultimately yield, but no one

* Life of Lord Sidmouth, i. 302.

† True, Eldon pronounced the charge, that he had taken advantage of the King's weakness to prejudice him against Mr. Fox, to be a direct falsehood. His biographer candidly remarks, that this “denial must not be extended beyond the charge it was meant to meet, of having taken advantage of the King's weak state to excite a prejudice against Fox in the royal mind”—meaning probably, that, as he did not believe the King to be incompetent, he might safely deny that he took any advantage of his weakness.—*Twiss*, i. 356.

undertook to set limits to its duration. The same reasons, too, were also given for this favourable prognosis—the patient's previous good habits and firm health, the suddenness of the attack, and the general curability of the disease. To the question, whether his Majesty's age, then seventy-two years, was not an unfavourable circumstance, the unanimous answer was, that, as a general rule, extreme age was an unfavourable circumstance, in mental as well as other diseases; but, in the present case, it would probably have little influence upon the result, because the King had borne his age remarkably well, and the attack had originated in circumstances independent of any bodily indisposition. To the question, whether the King's very defective sight—for he had become almost, and soon after entirely, blind—might not operate unfavourably, the reply was, substantially, that, in the early stages of the disorder, it would be more likely to have a beneficial effect than otherwise, by keeping from him many sources of irritation; while, in the later stages, it might, by diminishing his means and opportunities of occupation, retard his recovery. To the question, whether the fact of his having had so many previous attacks was not an unfavourable circumstance, Reynolds and Baillie replied—to them only was the question put—that his having recovered from so many previous attacks, furnished strong grounds for expecting recovery again. Baillie, however, qualified his opinion by the suggestion that the susceptibility to disease might be increased by its frequent recurrence, and thus prove an obstacle to recovery.

In regard to the form of disease, Willis said it was more allied to delirium than insanity—meaning that it was characterized by mental excitement rather than by fixed, definite delusions: "It has never borne the character of insanity," he said: "it never gets beyond derangement." This description, he added, was strictly applicable to the attack of 1801. Heberden said: "It is not merely the delirium of fever, nor is it any common case of insanity; it is derangement attended with more or less fever, and liable to accessions and remissions." The form of disease which they had in view is common enough; and though the progress of science may have contributed nothing to our knowledge of nature or of its treatment, it certainly has improved our nomenclature.*

The Report conveys no information respecting the medical or moral treatment, and we are left in doubt whether mechanical restraint was used. In fact, the examination was chiefly directed, not so much to the present condition of the King as to the attacks of 1801 and 1804, several of the physicians having

* The Report may be found in Stockdale's Parliamentary Register, 1810, and Hansard's Parliamentary Debates, 1st ser. xix.

attended him at one or both those periods, and to some interviews between the King and his ministers. It showed the usual amount of intrigue and cabal on the part of the King's friends, with subserviency to the predominant party and disregard of each other on the part of the physicians. As in the illness of 1788, the policy of the Tories was to stave off the regency by representing the attack as speedily curable, while the Whigs were equally strenuous in precipitating this measure. But the result appeared so doubtful, and the exigencies of the country were so pressing, that it could not long be evaded; and, accordingly, the Prince of Wales was made Regent in February, 1811—an event which enabled the Whig party, as is well known to all who are acquainted with the history of that period, to verify the scriptural declarations respecting the faithlessness of princes.*

The progress of the disease may be gathered from casual notices in the memoirs, correspondence, diaries, &c., of the time, but not so exactly as it might be on some interesting points. On the 26th of January, Eldon spent an hour with him. "He is not well," says the Chancellor, "and I fear he requires time. In the midst of this state it is impossible to conceive how right, how pious, how religious, how everything that he should be, he is, with the distressing aberrations I allude to."† In his clearer intervals he became somewhat impatient of restraint, and was rather importunate to be restored to his regal state. The physicians, in their report to the Chancellor, which must have been about the first of February, say that "he appears to be going on in the most favourable manner. It is right to mention, and we do not think it an unfavourable circumstance, that he has occasionally adverted to the subject of his former delusion, but in so slight a manner as to increase our confidence in its gradual subsidence from his Majesty's mind."‡ The Queen, in a note to Lord Eldon, soliciting the attendance of one of the council at Windsor at least once a week, says: "The King is constantly asking if not one of the council is coming to do so, [to receive the report of the physicians,] and seems to feel that putting it off procrastinates his recovery, as his Majesty (*she is sorry to say*) thinks himself too near that period."§ Spring brought no improvement of the King's disorder. In a note of Lord Ellenborough, April 3rd, he speaks of the King's "delusions and irregularities, and extravagances of plans and projects, of which we hear daily."|| May 25th, the Duke of York had an inter-

* Romilly (Memoirs, ii. 177) says that the Prince was determined to make no change in the cabinet, in consequence of the strong representations of one of the King's physicians of the probability of his recovery.

† Twiss, i. 359.

‡ Ibid. i. 359.

§ Ibid. i. 359.

|| Ibid. i. 363.

view with him, in which his mental condition was pretty fairly exhibited. "He appeared," he says, "at first, very much affected at seeing me, and expressed himself in the kindest and most affectionate manner upon my re-appointment to the chief command of the army; but soon flew off from that subject, and then ran on, in perfect good humour, but with the greatest rapidity, and with little or no connexion, upon the most trifling topics, at times hinting at some of the subjects of his delusion, in spite of all our endeavours to change the conversation."* Robert Willis expressed to the Duke his alarm at the King's "frivolity, or rather imbecility, of mind."

Until July, the cloud which enveloped the mind of the King occasionally lifted up, and thus were strengthened the hopes of his complete restoration. It was one of the curious traits in his case, that, at those times, he became conscious of his infirmity, though he sometimes manifested this consciousness in rather an uncommon manner. An instance is related by Francis Horner, in a letter to his father, in the spring of 1811. "There was a very affecting proof of the King's melancholy state given last week at the concert of ancient music; it was the Duke of Cambridge's night, who announced to the directors that the King himself had made the selection. This consisted of all the finest passages to be found in Handel descriptive of madness and blindness, particularly those in the opera of Samson; there was one also upon madness from love, and the lamentation of Jephtha upon the loss of his daughter; and it closed with 'God save the King,' to make sure the application of all that went before."†

Dr. Simmons and Dr. John Willis, who had attended the King in former attacks, had not been employed in this, the Queen fearing that it might awaken disagreeable emotions. A year having passed without any improvement, these two physicians were joined to the medical corps on the 9th of October, together with Dr. Monro, then visiting physician at Bethlehem. They were all examined touching the King's condition, both by a committee of the Lords and a committee of the Commons, towards the middle of January, 1812.

From this examination we gather that, during the months of April, May, and June, the King was apparently improving, "very little disorder being exhibited," says Heberden. It was characterized by exaltation, extravagance, and frivolity—false reasoning upon real facts. About the middle of July the disorder assumed a new character, gross delusions being exhibited in connexion with the last-mentioned traits. His sight and hearing were quite gone, but the other senses were as acute as

* Twiss, i. 363. † Memoirs and Correspondence, ii. 70.

ever. He retained a consciousness of his regal state, and during the latter part of the year, when there seemed to be a little improvement, he bore his part in conversation very correctly, for a few minutes, and related anecdotes of the past. The physicians were all as confident in the opinion that his recovery, though not hopeless, was highly improbable, as they were, the year before, in the opinion that he would recover. This change in their prognosis they attributed chiefly to the change in the phasis of the disorder, which occurred in July.*

This report leaves us entirely in the dark respecting the nature of the delusions which possessed the King's mind, but the following passage from Lord Eldon's papers indicates one of them. "It was agreed that, if any strong feature of the King's malady appeared during the presence of the council, Sir Henry Halford should, on receiving a signal from me, endeavour to recal him from his aberrations; and, accordingly, when his Majesty appeared to be addressing himself to two of the persons whom he most favoured in his early life, long dead, Sir Henry observed, 'Your Majesty has, I believe, forgotten that —— and —— both died many years ago.' 'True,' was the reply, 'died to you and to the world in general, but not to me. You, Sir Henry, are forgetting that I have the power of holding intercourse with those whom you call dead. Yes, Sir Henry Halford,' continued he, assuming a lighter manner, 'it is in vain, so far as I am concerned, that you kill your patients. Yes, Dr. Baillie —— but, Baillie, Baillie,' pursued he, with resumed gravity, 'I don't know. He is an anatomist; he dissects his patients; and then it would not be a resuscitation merely, but a recreation, and that, I think, is beyond my power.'"[†]

The following memoranda of his condition from 1812 till his death are given by an anonymous writer, but are well authenticated, I believe, and comprise all that I have been able to find respecting this period. "At intervals he still took a lively interest in politics. His perception was good, though mixed up with a number of erroneous ideas; his memory was tenacious, but his judgment unsettled; and the loss of royal authority seemed constantly to prey upon his mind. His malady seemed rather to increase than abate up to the year 1814, when, at the time the Allied Sovereigns arrived in England, he evinced indications of returning reason, and was made acquainted with the astonishing events which had recently occurred. The Queen, one day, found the afflicted monarch engaged in singing a hymn, and accompanying himself on the harpsichord. After he had concluded the hymn, he knelt down, prayed for his

* Hansard, xxi. 73.

† Campbell's Lives of the Lord Chancellors, art. "Eldon," vii. 222.

family and the nation, and earnestly supplicated for the complete restoration of his mental powers. He then burst into tears, and his reason suddenly left him. But he afterwards had, occasionally, lucid moments. One morning, hearing a bell toll, he asked who was dead. 'Please your Majesty,' said an attendant, 'Mrs. S.' 'Mrs. S.!' rejoined the King, 'she was a linen-draper, at the corner of — street, and brought up her family in the fear of God. She has gone to heaven: I hope I shall soon follow her.' He now became deaf, imbibed the idea that he was dead, and said, 'I must have a suit of black in memory of George III., for whom I know there is a general mourning.' In 1817 he appeared to have a faint glimmering of reason again; his sense of hearing returned more acute than ever, and he could distinguish persons by their footsteps. He likewise recollected that he had made a memorandum many years before, and it was found exactly where he indicated. After 1818 he occupied a long suite of rooms, in which were placed several pianos and harpsichords; at these, he would frequently stop during his walk, play a few notes from Handel, and then stroll on. He seemed cheerful, and would sometimes talk aloud, as if addressing some nobleman; but his discourse bore reference only to past events, for he had no knowledge of recent circumstances, either political or domestic. Towards the end of 1819 his appetite began to fail. In January, 1820, it was found impossible to keep him warm; his remaining teeth dropped out, and he was almost reduced to a skeleton. On the 27th he was confined wholly to his bed, and on the 29th of January, 1820, he died, aged 82 years."*

* "Georgian Era," i. No authority is given for the statements in this work, and I am unable to verify them.

It is a curious coincidence, that this monarch, who suffered so much from mental diseases, should have been pursued, as if by a kind of fatality, by insane people. In 1786, an old woman (Margaret Nicholson) attempted to stab him, as he was alighting from his carriage; in 1790, a lieutenant of the army (John Frith) threw a stone at him through the window of the carriage in which he was riding; and, in 1800, a soldier (James Hadfield) shot at him with a pistol in the theatre. Miss Burney says that, during his illness in 1788, they were often annoyed by insane persons, who contrived to elude the restrictions of the palace and to roam over the grounds. The persons who committed the first two assaults were so obviously insane that, without any further action, the Privy Council sent them to Bethlehem Hospital. Hadfield was brought to trial, and, it being on an action of treason, his counsel was allowed to speak in his defence; for, until quite recently, this privilege was never permitted in criminal cases, except those of treason. It was on this occasion that Erskine made his greatest forensic effort; and it is a fact that may abate our pride of progress, that it has never been equalled in the clear apprehension it displays of the phenomena of insanity, in its plain and cogent views of responsibility, and its triumphant demolition of those principles which had been regarded, from the earliest times till that moment, as the settled law of England respecting insanity.

Like everything connected with State affairs, the incidents of King George's attacks have been enveloped in secrecy and mystification, and hence the difficulty

ART. VIII.—ON THE USE OF CHLOROFORM IN THE TREATMENT OF PUERPERAL INSANITY.

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IN a paper I recently read before the members of the Medical Society of Liverpool, I drew their attention to the great benefit to be derived from the use of anæsthesia in the treatment of certain forms of puerperal mania. In consequence of the favourable opinions that have been expressed with reference to the paper, and as I believe the subject considered in it is one of much importance, I have been induced to revise the paper, and give it its present form.

The administration of chloroform in cases of mania is a subject that has already been under inquiry by those engaged in the treatment of insanity; but, whether from too much having been anticipated from it, from its having been indiscriminately used, or from some other cause, it seems to have fallen into disuse. I am not aware that it has ever been used extensively in such cases as I shall have to detail, or the principles on which alone I think it is likely to be beneficial, and which it is my intention to endeavour to lay down in the course of this paper.

It is in cases of puerperal mania that I have most extensively used the remedy, and although my experience of its use is not confined to such cases, it is of these I can speak with the greatest confidence.

It is not my intention to treat in a systematic manner of the disease under consideration, nor to review the various opinions that have been from time to time held with reference to its nature; nor shall I examine at any length into the value of the various modes of treatment which have at different times prevailed. My object is rather to endeavour to ascertain the cases

of distinguishing between the true and the false. Some of them are obviously fabulous, and, together with others less improbable, had their origin, undoubtedly, in that sort of gossip which would naturally spring from such an interesting event as the insanity of the sovereign. Considering that the purposes of this narrative could be answered only by the strictest historical accuracy, I have been careful, in every instance, to indicate the source of my materials, and to make use of none that could not be well authenticated. The necessity of this kind of caution can scarcely be appreciated by those who have never learned, from their own inquiries into past events, how the false, the fabulous, the exaggerated and the true become blended together beyond the power of the most patient research to separate. To relate a striking incident, or a pointed anecdote, is an easy and agreeable duty; but to search out the authority on which they rest—in other words, to perform a great deal of fruitless labour—is a task often difficult and disagreeable.

in which the use of anæsthesia is specially called for, and the nature of the symptoms it is calculated to control.

The statistics of insanity occurring in women show a considerable per-centage of cases of the puerperal form, that is say, of cases occurring after parturition, during, or immediately after, lactation. Of 3096 cases I have collected from various sources, 219 were cases of puerperal insanity, making about 7 per cent. This per-centage, however, is not a correct one, inasmuch as in the total number of cases women of all ages are included; whereas those past the period of child-bearing should be excluded, as no longer liable to the conditions in which puerperal insanity can occur. If such cases were omitted from the estimate, it is probable we should have a per-centage of about 10.

It seems to be a common opinion that cases of puerperal insanity very rarely, if ever, prove fatal; and it becomes an important consideration to correct this, which I believe to be an error likely to be attended with serious consequences. It is fortunately true that the majority of cases do recover, but the statistics of lunatic hospitals show a large per-centage of cases which remain incurable, a smaller, but by no means a satisfactory one, of cases which prove fatal.

The experience of practitioners with reference to recovery differs very materially, and I believe from this reason,—that some have observed cases in their private practice, and others in the practice of asylums; and inasmuch as those cases which are sent to asylums are generally of a far more serious character than those kept at home, it follows that the mortality in the one case will be greater than in the other.

The following table shows the rate of mortality, recovery, and incurability of 280 cases:—

Of 92 cases recorded by Esquirol, 55 recovered, 6 died, 31 remained incurable.					
57	„	Dr. Burrows,	35	„	10
131	„	Dr. Webster,	81	„	6
<hr/>		<hr/>		<hr/>	
280			171		22
			or,		or,
			61 per cent.		7.85 p. ct.
				or,	31 per cent.
				1 in 13.	

Dr. Copland states, from a series of cases he has collected, that about 4 in 5 recover, and 1 in 8 dies.

With the exception of a very few cases, in which the symptoms seem to be rather those of phrenitis than of mania, death does not take place at a very early period of the disease, but after the lapse of a considerable time, as in the cases mentioned by Dr. Webster, in which death took place at periods varying from 13 days to three months from the commencement of the attack.

The few statistics I have given will be sufficient for the pur-

pose for which I have adduced them, viz.—to show the relative rates of mortality and curability of the disease: they indicate, at least as far as hospital cases are concerned, a rate of mortality which, although not high, is far from being of a satisfactory nature; and they tend to show that the disease does not kill at its onset, but after it has run a somewhat lengthened course.

It becomes necessary to examine into the causes of this rate of mortality, and to ascertain the nature of the symptoms which indicate danger, and which usually precede a fatal issue. On this subject I quote the following remarks from different authors. Dr. Copland says: “The chief danger in the disease, especially in the more pure or non-febrile form of it, arises from debility and exhaustion of nervous power; and this is the more to be dreaded when the disorder follows hæmorrhage or improper bleeding, when the pulse is very rapid, weak or small, or fluttering, and when there are great restlessness and long-continued want of sleep.”

Dr. Reid, in an article in the *Psychological Journal*, remarks: “Exhaustion appears to be the principal source of danger; the want of sleep, intense excitement and monotonous self-fatigue, all combine to increase it; and it is often a matter of surprise to us, for what a length of time the human frame can withstand their effects. Should even the mental symptoms somewhat improve, yet if the insomnia still continue, with a quick pulse and other increasing symptoms of bodily debility, the termination of the case is to be looked for with apprehension.”

Dr. Gooch, in his work on diseases of women, remarks “that his experience accords with that of Dr. Hunter, viz.—that there are two forms of puerperal mania; the one attended by fever, or at least the most important part of it, a rapid pulse; the other accompanied by a very moderate disturbance of the circulation: that the latter cases, which are by far the most numerous, recover, that the former generally die.” Three cases reported by him “terminated fatally: all were attended by a very rapid pulse; some attended by a quick pulse recovered, but none of these were treated for paraphrenitis.” He further states, speaking of favourable and unfavourable symptoms,—“Nights passed in sleep, a pulse slower and firmer, even though the mind continues disordered, promise safety to life; on the contrary, incessant sleeplessness, a quick, weak, fluttering pulse, and all the symptoms of increasing exhaustion, portend a fatal termination, even though the condition of mind may be apparently improved. In the cases which I have seen terminate fatally, the patient has died with symptoms of exhaustion, not with those of oppressed brain, excepting only one.”

In the remarks I have quoted, I entirely concur. The danger

of fatal issue does not depend upon any symptoms indicative of active mischief going on in the brain, or any other organ ; the nervous excitement is not the result of inflammatory action in the brain, and in itself is secondary in point of danger to the exhaustion of nervous power and physical depression which supervene in consequence of the long-continued wakefulness, restlessness, and abstinence from food.

The refusal of food, which in severe cases of the disease is doggedly persisted in, is a matter for serious consideration, and it becomes, in fact, one of the most important symptoms to be dealt with. It is by no means uncommon for a patient under the influence of maniacal excitement to pass day after day, and night after night, even for weeks, in a state of continued restlessness and insomnia ; and during this period there is obstinate refusal of food, and in some cases it becomes impossible to get the smallest quantity of nourishment into the system. Under these circumstances, it is not surprising that debility and physical exhaustion ensue, that the eye becomes haggard and the cheek sunken, that the heart becomes weak and rapid in its pulsations, and that ultimately the patient dies prostrate, whilst almost up to the period of dissolution the mental excitement continues. Should, however, death not result, the prolonged state of excitement and consequent debility will seriously impair the chances of perfect mental recovery, and increase the probability of termination in permanent mania.

The view taken above of the nature of the symptoms which indicate danger, seems to be borne out by the results of the *post-mortem* examinations of those cases that have terminated fatally. Esquirol remarks of the appearances in the cases he examined, "that, strictly speaking, they offer nothing in particular,—nothing, in fact, which enables us to recognise the material cause of the disease, or discover its seat."

The appearances described by observers in this country are almost entirely in accordance with the above. Dr. Burrows says, "The morbid appearances are not of a marked character. The pure cases of the malady present little beside anæmia of the brain and its membranes. Other morbid changes are simply coincident."

Dr. Webster has found "turgidity of blood-vessels of brain and membranes—effusion into fifth ventricle."

Dr. Gooch, in the *post-mortem* examinations he made, found "no disease of brain—blood-vessels of cranium generally empty."

From the consideration of the *post mortem* appearances in the fatal cases, and from the examination of the symptoms exhibited during life, it is scarcely possible to do otherwise than

conclude that the disease is one of irritation rather than inflammation. This seems to be the opinion now generally entertained by those who have had most opportunities of observing the disease. The affection seems to be one in which the brain and nervous system generally are in a condition of great irritability; and this appears to be the result, more or less, of a state of exhaustion. The disease is one rather of debility than increased power, and the condition of the nervous system is probably somewhat analogous to that which exists in delirium tremens.

Since more correct notions of the nature of the disease have prevailed, changes have taken place in the treatment. I believe, however, that, at the present time, erroneous opinions are still held which lead to an injurious line of practice, and that in many cases, especially at the onset of the symptoms, when there are great excitement and apparently increased vascular action, depressing remedies are often resorted to, which lower the patient's strength and diminish the chances of ultimate recovery. In the hands, however, of the well-informed, such treatment is not resorted to; it is replaced by remedies addressed to the nervous system. Sedatives and narcotics are the sheet-anchor. Before, however, these are administered, cathartics, more or less powerful, according to the nature of the symptoms and the condition of the patient, should be used; for almost invariably in these cases the bowels are much loaded, and much relief is obtained by evacuating their contents.

Amongst the remedies that have been used for the purpose of controlling this disease, opium occupies the first place. Almost all authors speak in high terms of its value. My experience does not in all respects agree with the opinions thus expressed. I have observed but little benefit follow its use in the severe forms of puerperal mania, and still less in other forms of mania. In the milder forms of the disease, it is, undoubtedly, of great value, and when the patient will swallow both food and medicine, and when the only indication is to procure sleep, it will often alone be sufficient to effect recovery; but there are cases in which, from the continued restlessness and obstinate refusal of the patient to take anything whatever, opium cannot be administered; and again there are other cases in which, although administered, it produces no good result, but seems rather to increase the mental excitement. In cases of this kind, the long-continued restlessness, insomnia, and absence from food, produce a state of exhaustion which, if not relieved by the introduction of nourishment into the system, and by rest, will soon terminate fatally. It is in such cases as these that we notice the great value of chloroform.

As illustrations of the line of practice I wish to recommend,

and of the benefit to be derived from it, I have selected the following cases, which occurred in the Liverpool Royal Lunatic Asylum, under the conjoint care of Dr. Formby, the visiting physician to the asylum, and myself, during the period I was medical attendant to the institution :—

CASE No. 1.—C. D. E., 24 years of age, of full habit and nervous temperament, was admitted into the Liverpool Royal Asylum as a patient.

Six weeks prior to admission, she was confined with a girl. She continued well for three weeks, and at the end of that period began to exhibit symptoms of a deranged state of mind. She had been of active habits, but had confined herself almost entirely to household duties. There had been no previous attack. Treatment had been adopted at her own home for a short time, and for three days before admission she had been put under restraint: during this period she had been very violent, and had refused food.

When admitted into the asylum, she laboured under alternate depression and excitement; there was an almost entire absorption in religious matters, and great irritability of temper. She was very restless and sleepless, and required constant watching, to prevent her committing violence. She refused all food, and objected to everything intended for her comfort.

There was nothing remarkable about her physical condition. She was tall and well-made. One of the mammæ showed symptoms of incipient inflammation; the pulse was quick, and the tongue furred.

A saline aperient was ordered, and belladonna lotion to the breast.

She continued in the condition above described for four days. She refused all food, had no sleep, and was very much excited. There was, however, no heat of scalp. She was ordered effervescing draughts, with one-third of a grain of morphia, every three hours; and a blister was put to the nape of the neck. On the evening of the fifth day, in consequence of her excited condition, a powerful opiate was ordered for her, but no good result was produced. On the sixth day there was no improvement; symptoms of exhaustion were coming on, and she was getting emaciated from want of food, which she still refused. She had had very little sleep, although she had taken the morphia regularly. She was put under chloroform, and an enema of beef-tea was administered whilst she was under its influence. The morphia was omitted. She slept for several hours after the exhibition of the chloroform, and when she awoke was much more quiet, and remained so for two days, during which she took her food. At the end of that time she again refused food, and had a par-

tial return of her previous symptoms; and as these did not subside, she was again put under chloroform on the tenth day, and another enema of beef tea was given; the same result followed as before, only to a more marked extent. She now sensibly improved, and on the twenty-first day, eleven days after the second exhibition of the chloroform, I find the following note: "Greatly improved, eats and sleeps well, answers questions for the first time." This favourable state of affairs continued up to the forty-fourth day; on that day she became restless and excited, and chloroform was again exhibited. After that date she had no further relapse. She steadily improved, both mentally and physically, and was discharged well, after having been under treatment in the asylum nearly four months. I have lately learned that she continued well after her discharge, and has since given birth to a child, no symptoms of mania having been developed.

CASE No. 2.—A. M. S., 26 years of age, of spare habit and nervous temperament, was admitted into the Asylum on ———.

A little more than three weeks prior to admission she gave birth to a boy—her fourth child. There was nothing remarkable about the labour, except that it was attended with some amount of hæmorrhage. All her previous confinements had been good, and she had always made a good recovery; but during the latter part of her last pregnancy, her health had been unsatisfactory. She became low-spirited and desponding, and fell into a low physical condition generally: she took no exercise, and suffered much from constipation of the bowels. She went on well after her confinement—except that she had but little milk—up to about ten days prior to admission—viz., about a fortnight after the birth of the child. Symptoms of a somewhat hysterical nature seem to have come on at that time, and she said she was going out of her mind. Three days before admission she became violent and excited in manner, and incoherent in speech. It was stated on her admission that she had had no regular sleep for ten days, and had taken but little food. Her general habits were said to be sedentary and temperate.

When admitted into the Asylum she was very restless, and could not be kept quiet for a moment. She was constantly talking in a very incoherent manner; she fancied she was subjected to shocks of electricity, and that she was beyond the hope of salvation. There was no peculiar physical conformation about her; she was thin, of moderate stature, and rather intelligent-looking; the pulse was rapid, and feeble. She was kept quiet, and constantly watched for three days; but as the symptoms did not mend, and she had had no sleep, she was put under the influence of chloroform for a short time. She slept but little

after it, and on the following day was very restless. She was ordered a brisk cathartic. She was more quiet after the bowels had acted freely; but the next day the restlessness and want of sleep returned. Chloroform was again exhibited at night. It produced but little effect, and the case now began to assume a serious aspect, for the patient was getting worn out, from the fact that she took but little food, and had but little sleep. In order to prevent her sinking from want of nourishment, an enema of beef-tea was administered under chloroform. She retained the injection, and slept for the first time for an hour and a-half. It was repeated on the following day under chloroform, when she slept for three hours: this was on the eleventh day after admission. She now began to take food, and to pass her motions, of a healthy character, regularly. On the twelfth day chloroform was again exhibited at night; but it produced no sleep; and, consequently, on the following night she had mxxx of Battley's solution. She slept after taking the draught for five hours, and was much more quiet the next day. The medicine was repeated, but it produced no sleep, and the restlessness returned, and she again refused food. The enema of beef-tea was repeated under chloroform. For the next few days she remained tolerably quiet—slept for a few hours every night after chloroform, and took some food. On the sixteenth day she had a brisk cathartic of croton oil, which seemed to be attended with benefit.

On the eighteenth day the chloroform was omitted, and tincture of henbane was tried—administered every four hours; but it produced no sleep; and mxi of Battley were tried with the same result. On the twenty-first day she suddenly improved: she had been restless during the day, but in the evening she retired to bed of her own accord, and slept. From this day she began to improve in her physical condition; but for some time there was no marked improvement mentally. She continued under treatment for upwards of seven months, and was then discharged. At that time her general health was good, the catamenia had returned, and the mind was becoming gradually restored.

I have lately learned that this patient after her discharge perfectly recovered her mental faculties.

CASE No. 3.—A female, 28 years of age, of spare habit and nervous temperament, was admitted into the Asylum on ———.

About nine weeks before admission she gave birth to a boy. No history of the confinement could be obtained; but it was stated that for nine months previous to that event she was so ill as to be obliged to keep her bed. No account, however, was

given as to what she suffered from. About a week before admission, symptoms of insanity first appeared. She became very violent at times, and threatened to throw herself from the windows of her house. She was placed under treatment, but no benefit took place. She suffered from fits of a paroxysmal character, with lucid intervals. After her admission into the Asylum she became exceedingly violent at times; she had a recurrence of fits of an epileptoid character; she was very restless, and would not answer when spoken to. She laboured under the delusion that her blood was boiling, and that she had wheels in her inside. In physical condition she was low, being much emaciated,—to such an extent even, that the pulsations of the abdominal aorta could be distinctly felt on placing the hand on the surface of the abdomen.

On the second day of her admission the fits continued, and she refused to take food; she passed a quiet night. From this date up to the twenty-eighth day, there was but little improvement. On account of her restlessness and want of sleep, she was frequently put under chloroform at night, almost always with the result of giving her a quiet night. At times she refused food, and enemata of beef-tea were administered. Morphia was tried on one or two occasions to procure rest, but without effect. She required constant watching, and was kept in the padded room. She had a great tendency to injure herself, and if an opportunity were allowed her, she would knock her limbs and head against the walls, and on two or three occasions she thrust her head through panes of glass. Frequently she would refuse food for an entire day, and on the next, eat everything placed before her. She was allowed anything she would take; but she continued up to this period much emaciated. She went on with but little alteration for two months, the chloroform being occasionally administered, and also the beef-tea enemata. She subsequently began to improve, and at the end of the seventh month she was discharged at the request of her friends, nearly well.

I have lately learned that after her discharge she perfectly recovered, and continues well.

The first case exhibits in a marked manner the beneficial influence of chloroform; the opiate treatment signally failed either to procure rest or allay the mental excitement, which increased *pari passu* with the symptoms of physical exhaustion and debility. It became urgently necessary under the circumstances at once to interfere, and check, as far as possible, the tendency to sinking which was manifest. Accordingly, chloroform was administered, and some strong beef-tea was injected into the rectum; the relief was marked and persistent for some

days; and when a renewal of the symptoms occurred, a renewal of the remedy produced a renewal of the relief.

In the second case detailed, the effects produced were not so immediately striking as in the first; but it must be borne in mind that the case is an example of a class of very great severity. The most formidable symptom was the refusal of food, which was persistent to an extraordinary extent; and to so extreme a condition of exhaustion was the patient reduced, that had not some nourishment been introduced into the system at the time the injections were commenced, in all probability rapid sinking would have set in. The administration of chloroform, combined with the injections, produced an amount of sleep not previously obtained; and after the second injection, food was taken, showing that the system was beginning to rally to some extent. Chloroform soon lost its power of producing lengthened sleep in this case, and the same fate attended opiates. It, however, produced a certain effect on the nervous symptoms and moderated the mental excitement, and further, it allowed of the introduction of nourishment into the system through the medium of the enemata.

The indications for the use of chloroform were strongly marked in the third case I have reported. Something to calm the excitement, if only for a short time, was urgently called for, and opium failed to produce the effect; and, in addition, the emaciated condition of the patient rendered the introduction of food into the system absolutely necessary.

The cases I have detailed will, I think, be sufficient to point out the benefit to be derived from the use of chloroform in the severe forms of puerperal insanity; but I should by no means confine its use to such cases. I believe it is calculated to afford the best means of treating the disease when it exists in a milder form. At the *very* commencement of an attack it is likely to increase the mental excitement, and therefore its administration is not to be recommended; but when the disease has existed for a few days, it is probably the best sedative we can use. The milder forms of the affection will yield to other treatment; but it is especially in the severe forms, in which, from lengthened wakefulness, excitement, and abstinence from food, there is every prospect of sinking from exhaustion, that this remedy is so valuable. If an attempt be made to introduce food into the rectum without anæsthetic agents, the attempt will be frustrated, either by the resistance of the patient or the rejection of the enemata, but with the use of anæsthesia, no difficulty is experienced, and in no single instance have I known the rectum to put on expulsive action. The injections may be given, if necessary, two or three times a day, and the results will soon be

manifested in the improved condition of the patient, and often the willingness to partake of food. In dealing with these cases, it is not as though we had to deal with patients in a sound state of mind, or suffering from organic disease. Food is required, and would be easily borne and readily digested, but the patients are unconscious of the want, and ignorant of the danger of prolonged abstinence. Nor can such cases be starved into eating. The debility which ensues aggravates the mental symptoms, the excitement often becomes greater as the case progresses, and the refusal of food more obstinate.

I have already mentioned my opinion of the value of opium in the treatment of this disease, and I have the satisfaction of knowing that the lengthened experience of Dr. Formby, the physician to the Asylum, bears out the view I entertain. It must be remembered that I now refer to severe cases, and no one will for a moment doubt that those I have detailed were of such a character. In those cases opium produced little or no benefit, although freely administered; and supposing it would act, it is only calculated to meet two of the indications required—viz., to subdue the restlessness, and promote sleep. It may be said that food will not be refused, if sleep and quiet are obtained; experience by no means bears out this view. Further, the administration of opium is calculated to check the secretions and constipate the bowels, and thus produce a condition which tends to aggravate the mental symptoms.

On the other hand, the administration of chloroform meets every indication. It procures rest and quiet, it is generally followed by a more or less lengthened sleep, its effects may be kept up for hours without, I believe, producing any injurious effect whatever, and whilst the patient is enjoying the rest which the agent affords her, she may be fed by enemata. She may even be fed by the mouth. There is no objection, under certain circumstances, to the injection of food into the stomach, the patient being placed in a chair. I performed this operation on one patient on three consecutive days. The patient was a man who for a whole week after admission refused food, not a particle of any kind passed his lips, and finding there was no possibility of making him eat, I proposed that he should be put under chloroform, and that some beef-tea should be injected into his stomach. This was accordingly done, about a pint and a half of strong beef-tea being injected through the medium of the stomach-pump. I had some fear that the fluid would be rejected, but the result was most satisfactory, every particle was retained, and on the two following days the process was repeated, on the last day without chloroform; the patient being more quiet, allowed himself to be held and have the food injected into him, although he would not swallow any of his own accord. He subsequently

began to eat, and we had no further trouble with him. I believe his life was saved by this timely interference.

The injection of food, however, into the rectum, is best calculated for the cases I have alluded to, for the patient may be placed on a bed, in the recumbent posture, and thus left to sleep after the enema has been given.

The possession of an anæsthetic agent, like chloroform, to be used as I have mentioned, always affords a hope of saving the patient's life, however severe the case may be, and however great the exhaustion and debility. The action is twofold, and on this its great value rests. It calms the nervous system, and restores its tone by its sedative action and the rest it produces, and it enables the patient to receive nourishment, and thus to survive till the virulence of the disease is exhausted.

Independently of the importance of introducing nourishment into the system to prevent physical exhaustion, its beneficial influence on the disease itself must not be forgotten. That even a spare diet following a moderately good one will produce diseases of a character analogous to the one in question, has been abundantly proved, and I need scarcely allude to the remarkable instance which took place at the Penitentiary many years ago. The prisoners in that institution were, for some reason, placed from a very fair diet to an extremely moderate one, and in a short time diseases of the brain, headache, vertigo, delirium, apoplexy, and even mania, became developed. If, therefore, the withdrawal of a portion of food will produce such diseases in healthy individuals, it is but logical to infer that protracted abstinence will tend to aggravate their symptoms, and we may thus see the importance of not allowing any patients suffering from diseases of the same, or an analogous kind, to pass even a short time without receiving nourishment into the system. In the treatment of delirium tremens, our great object after procuring sleep, is to introduce nourishment, knowing well that the condition of exhaustion, which is an essential feature of the disease, and the wear and tear produced by the constant excitement and restlessness, is only to be permanently restored by giving vigour to the system; and thus it is with puerperal mania; the disease itself indicates a condition of exhaustion, and the great excitement and continuous restlessness increase the physical debility.

Chloroform has been used in cases of delirium tremens, and from the success which has attended its use its value in analogous cases might be inferred. I believe we have much to learn with reference to the use of anæsthesia in diseases depending on nervous irritability. It is by no means unfrequent to witness cases of this kind, in which the predominant symptoms are those of an excited nervous system, with great depres-

sion of the physical powers, attended by insomnia, restlessness, and refusal of food. These cases generally terminate fatally, after a more or less lengthened course, and the *post-mortem* appearances reveal an anæmic condition of the brain and body generally, attended, in some cases, by a low form of inflammation of a chronic character, and, very slight, of some portion of the viscera. Moral causes are generally the excitants of such affections, and any treatment addressed directly to the disease will be attended by little or no benefit; but by using chloroform in the manner I have described, for the purpose of calming the excitement, of producing rest, and as a means of introducing food into the system, the physical depression and tendency to sinking from exhaustion may be avoided, and we may hope that the nervous system will have time to recover from the shock it has sustained, and life may thus be saved.

ART. IX.—PHYSIOLOGICAL PSYCHOLOGY.

No. III.

BY ROBERT DUNN, F.R.C.S. ENG.

Continued from No. III., p. 418.

PSYCHOLOGY, the science which investigates *the phenomena of consciousness*, busies itself with *the states, operations, and laws of mind*. Now the human mind—"ILLUD, quod sentit, quod sapit, quod vult, quod viget,"—is "one and indivisible," for the unity of consciousness is the deepest and the most indisputable fact of our nature, and *to feel, to perceive, to think, and to will*, are, in truth, so many *acts or states* of mind. In other words, intelligence, emotion, and volition, are interwoven with each other, and are *one* at the root. We live in a succession of states, and the fact of the succession of ideas is indisputable. For although, as Sir Henry Holland has well observed, "mental science, from its nature, affords no exact measure of time,—the mind works in a *succession of states*. Two thoughts, or acts of memory, however closely related to one another, cannot be presumed to exist, at *the same instant*, in the consciousness,—each has its own individuality in time. Swiftness of succession naturally suggests unity of time and state, which has no real existence. Nor can the mind maintain two impressions *simultaneously*; and though the succession be uniformly pleasurable or painful, still it is *sequence*, and not coalescence of effects. And thus the ever-changing relation of individual consciousness in the sentient unity, to the different bodily and mental actions, which form the totality of life, illustrates best, though it may

not explain, the endless varieties and seeming anomalies of human existence.”*

“There exists but *one single principle*,” says Dr. Gall, “which sees, feels, tastes, hears, touches, thinks, and wills. But in order that this principle may become capable of perceiving light and sound, of feeling, tasting, touching, and of manifesting the different kinds of thought and propensity, it requires the aid of various material instruments, without which, the exercise of all these faculties would be impossible.”†

Still, however, the fact of the *duality* of the brain is not to be questioned. The brain is a double organ, and the symmetrical disposition of the parts of the encephalon on each side of the median plane must be admitted.

But, at the same time, this doubleness of the brain is in harmonious accordance with the doubleness of all the organs of sense; and, indeed, is just what *à priori* reasoning would lead us to expect as necessary to the functions of the special senses, as *double inlets* to knowledge. We have two cerebra, a right and a left brain, or hemisphere; the convolutions, or cerebral organs, are double, and the basement or fundamental ones of the cerebrum—the great internal convolutions, the *ourlet of Foville*—are perfectly symmetrical. The right brain corresponds exactly with the left, just as the right eye or ear corresponds with the left. But it by no means follows from this, as a necessary consequence, and as the late Dr. Wigan‡ has so laboured to prove, that the mind itself is *dual*—in other words, that consciousness is double; and that, because we have two brains, a right and a left brain, so have we *two minds*, each performing its own functions, but in perfect accordance so long as the two brains harmonize in quality, structure, and action with each other. All the information furnished to us by the senses tells of a mind “one and indivisible;” and in every instance in which there is a lateral doubling of the nervous centres, there we find a *commissural band*, like the corpus callosum, the office of which is manifestly that of a bond of union, associating the two sides of the cerebrum in one harmonious action. On this subject, Dr. Todd has well remarked:—

“I can no more infer the existence of two minds, from that of two brains, than I can assume a duality of our visual sense from the existence of two eyes. The two cases, indeed, are strictly analogous. The organic change on each retina develops a corresponding sensorial impression; and from the connexions which subsist between the retinae,

* *Vide* Sir Henry Holland's Chapters on Mental Physiology. Chap. iii., Mental Consciousness in relation to Time and Succession.

† *sur les Fonctions de Cerveau*, vol. i. p. 243.

‡ *Vide* the Duality of the Mind proved by the Structure, Functions, and Diseases of the Brain, and by the Phenomena of Mental Derangement, and shown to be essential to moral responsibility. By A. L. Wigan, M.D. London, 1844.

and still more from that between the centres of sensation, these impressions become *fused* into *one*. In like manner the organic change in the two brains developing nervous force, in similar modes and proportions, each being capable of affecting the mind similarly, although perhaps not identically, are yet so united in their action, that the double organic affection acts on the mind as *one*. But if, through default of the *connecting media* of the two brains, or through *lesion* of either, the organic changes in each do not harmonize with those of its fellow, then it is plain that two separate and distinct mental affections will result, and that more or less of confusion must ensue. The confusion results from the *want of simultaneous affection of the same mind* by *two separate and distinct brains*. If, in vision, each centre of sensation affected only its own mental phenomena, as Dr. Wigan's theory would compel us to assume, then each mind would perceive a different perspective projection of the object presented to the eyes, and an elaborate and complex mental process would be required to combine the two sensorial impressions. How much simpler is the view of this process, which assigns the combination of the double impression to a physical union in the brain of each physical change in the retina;* so that, in truth, but *one impression*, different from each of its excitant ones, reaches the *mind*. So also in normal intellectual action, the organic changes of the two brains are united by the *various transverse commissures*,† so that but *one* physical stimulus affects the mind, and excites but *one* train of thought. Not so, however, when, from any defect in the brains themselves or in the commissures, the physical conditions necessary for the organic states of the two brains cannot be fulfilled."‡

Still, however, the work of Dr. Wigan "On the Duality of the Mind," is highly suggestive; and, if fairly interpreted by the physiological psychologist, is calculated to throw much light upon *alternating* states of consciousness, delusions, and irregular volitions, as well as upon other obscurities connected with the phenomena of mind.

* Sir D. Brewster has shown that the fact that any near object makes two different perspective projections of itself upon the two retinæ was known so far back as 1613, to the Jesuit Aguilonius, who set himself to inquire how it is that the two dissimilar projections are blended into a *single unconfused image*, and came to the conclusion that it is not by reason of any optical conformity, but by a mental agency which he calls *common sense*. But to Professor Wheatstone belongs the exclusive honour of the *original idea*, and the practical demonstration of its correctness,—that it is on the mental combination of the two dissimilar projections made by a single solid object upon our two retinæ respectively, that our visual perception of its solidity depends; and to this *original idea* we owe his construction of the *Stereoscope*.

† An interesting case, in which the corpus callosum and fornix were imperfect, is published in vol. xxix. of the Royal Medical and Chirurgical Transactions, by Mr. Paget, with some important remarks. It may be fairly inferred that the office of the corpus callosum is that of a band of union to the convoluted surfaces of the hemispheres of the brain, the medium through which the double organic changes in the double cerebral organs are made to correspond with the workings of a single mind.

‡ Dr. Todd's Cyclopædia of Anatomy and Physiology, vol. iii.,—Physiology of the Nervous System, p. 723, b.

Sir Henry Holland, in his valuable "Chapters on Mental Physiology," has an admirable essay On the Brain as a Double Organ, showing its compatibility, *as such*, with unity of consciousness. But unity of consciousness does exist, for who can gainsay it? and is therefore, of necessity, compatible with the conformation of the brain as a double organ, however we may argue in explanation of the fact. Nay, more, does not this unity of consciousness, in perception, volition, memory, thought, and passion, constitute the sure and distinguishing characteristic of the sane and healthy mind? But there is another dynamical agency involved in the perceptive consciousness, *volition* or the *will*; and which, though limited in the sphere of its action to consciousness, is a mental element of paramount importance, for it has the power—varying, indeed, in degree in different individuals and at different times in the same individual—of *determining* and *controlling* the *succession* of our states, whether of thought or feeling. In the plenitude of its power it involves the highest attainments of which the human intellect is capable; and this power, be it remembered, of the mind, by the will, to regulate the succession of its states, whether those belonging to perception from *without*, or to thought and memory *within*, varying in different individuals and limited in all, *is given to us not merely to use, but to educate and exalt*. For, it has been well observed, "It is eminently capable of cultivation by steady intention of mind and habitual exercise; and thus, rightly exercised, it becomes one of the highest perfections of our moral and intellectual being. By no quality is one man better distinguished from another, '*than by the power of his will*;' by the mastery acquired over the subject and course of his thoughts; by the power of discarding what is desultory, frivolous, or degrading; and of adhering singly and steadily to those objects which enlarge and invigorate the mind in their pursuit."

"Magni est ingenii revocare mentem a sensibus, et cogitationem a consuetudine revocare."—CICERO, *Tuscul. Quæst.**

And thus, while on the one hand the great and fundamental *mystery of life* consists in the relation of consciousness and volition to the functions of the special senses, and to those of the encephalic organs, which connect man as a sentient, percipient, and intelligent being, with his own organization and with the material world without, the importance, on the other hand, of the duty of sedulously cultivating that dynamical agency which has such a power in determining and controlling the *succession of our ideas*, cannot be overrated, for "the intellectual character of every mental process depends on the manner of suc-

* Sir H. Holland, *Op. ante cit.*

cession, and especially on the action of the will in determining the result.

Now we have seen that *consciousness* with *volition* implies intelligence, and that, as antagonistic to mere consensual and instinctive feeling, it requires the instrumentality of the hemispherical ganglia for its manifestation. For, wherever the essential phenomena are present which formularize the perceptive consciousness—namely, *ideation* and *volition*, with their associates, *memory* and *emotional sensibility*,—the agency and instrumentality of the hemispherical ganglia are involved; in other words, the organs of the perceptive consciousness, in the cerebrum, are in effective operation.

We have also seen there are valid reasons for the belief, and I have avowed my own conviction on the point, that the great internal convolutions—the *ourlet of Foville*, and essentially the basement convolutions of the cerebrum—are the central organs of the perceptive consciousness, the portals to intellectual action, where sensory impressions, the intuitions of the special senses, whether sights, sounds, tastes, smells, or feelings, become *idealized* and *registered*—that is, *perceived*, *remembered*, and *associated*; and where, too, the *ideation* of outward *individualities* is effected: for the senses are the inlets,—the media which connect us with the world without,—through them the perceptive consciousness is reached, and to their intuitions we owe our knowledge of the sensible qualities of external existences. In the perception proper, indeed, of mere outward objects, as in the intuitions of the special senses, man stands on the same platform with the other vertebrata, for the process in each and in all is the same. The lower animals, by virtue of their perceptive consciousness, not only perceive external objects, but remember actions and incidents associated with them. They shun danger after past experience, and act voluntarily. They have evidently an intuitive sense of time, space, form, and distance. And besides the animal propensities, they display social attachments, desires and aversions, angry passions and joyous feelings. But in them, it is obvious, *ideation* has reference, *instinctively*, either to the satisfaction of their appetites or to self-preservation. It cannot escape observation, that the *conservation* of the individual and the *multiplication* of the species are their dominating instincts; and that in the fulfilment of these, all the sagacity and laborious industry which they manifest are exerted. It may be, indeed, fairly inferred that the intuitions of the special senses, and their allied feelings, appetites, and instincts, form the chief and predominant part of the mental life of the inferior animals; but, at the same time, it must not be forgotten that these, too, constitute the inferior region of the true or conscious mind, and enter largely into the complicated web of human existence.

The instinctive attachment of the mother to her offspring, but limited in duration to the period of its helplessness, appears to be as great among some of the inferior tribes as it is among many of the human races. But this attachment, even among social animals, ceases with the period of infancy and helplessness; and in their after life, those affections and endearing relations which are the charm of human life, have no existence. The attachment of the dog to his master is an enduring theme, but "it may be doubted whether we can find any instances of such feelings between animals themselves, excepting some cases of sexual unions. In general, they seem entirely destitute of sympathy with each other, indifferent in each other's sufferings or joys, and unmoved by the worst usage, or acutest pangs, of their fellows."* They are destitute of moral instincts.

The dog *knows* his master, and *remembers* scenes and actions in which they have been associated together. He may be said to have well-nigh all the rudiments of our perceptive knowledge—*ideation*, *emotion*, and *volition*; but he holds them in an instinctive form. He recognises his master by certain characteristics; but disguise those, and you balk his instinct. He is deficient in *reflective* as opposed to *immediate apprehension*, and of him it has been aptly said, "*Though he knows the person, he does not know how he knows.*" In the expressive language of Burns,

"Man is the god of the dog."

But man *perceives relations*, as well as external objects and their physical adjuncts. He notes events and circumstances in their *relations* to time and locality, or space. He is a *thinking* as well as a sensitive being, but every cogitative act necessarily implies an apprehension of the *relations* of the objects of *thought*. It involves a process of *comparison*, and the result is a *perception* of resemblance and difference. All knowledge, indeed, is a *relative* apprehension of things: and a *relation* cannot be rightly apprehended until we are equally familiar with both its terms, and until we can take our stand at either end and contemplate the other at will. And is it not this ability to shift the mental action, and to deal freely with the two sides of a *relation*, which constitutes the genuine mark of human intelligence, as distinguished from mere animal sagacity?

Now, in the perceptive consciousness of man with the great central organs, where *ideation* is effected, there are not only associated the super-orbital convolutions, through the instrumentality of which he acquires a knowledge of the physical adjuncts of natural objects, such as their size, form, colour, number, &c., but a still higher order of intellectual organs and faculties, by virtue

* Lawrence's Lectures on Physiology, Zoology, and the Natural History of Man.

of which he rises to the apprehension of the qualities and properties of external objects, and to a knowledge of their intimate structure and mutual relations, totally and altogether different from any intelligence that can take place in the case of the inferior animals.

In the emphatic language of Professor Sedgwick, "Man stands by himself, the despotic lord of the living world ; not so great in organic strength as many of the despots that have gone before him in nature's chronicle, but raised far above them all, by a *higher development of brain*,—by a special instinct for combination,—by a prescience that tells him to act prospectively,—by a conscience that makes him amenable to law,—by conceptions that transcend the narrow limits of reason,—by hopes that have no full fruition here,—by an inborn capacity of rising from individual facts to the apprehension of general laws,—by a conception of a cause for all the phenomena of sense,—and by a consequent belief in a God of Nature."*

Still, however, the elements of all his knowledge—intellectual, moral, and religious—come through the perceptive consciousness ; for they have their origin or source in intuitional or perceptive experience, in their respective cerebral organs, through the medium of the central organs of the perceptive consciousness, with which they are connected and associated. It is thus, through the perceptive consciousness, by the inlets of the special senses, that man gains his first glimpses of the *true*, the *beautiful*, and the *good*—of sublimity in nature, and of harmony in sound. For, as Mr. Morell has justly observed, "no one can doubt but that the creation around us has been formed according to the most perfect laws of form and beauty, or that the human mind is so constructed that the idea of beauty must, under the highest culture, correspond with the teachings of nature ; so that the mere presentation of the beautiful *without*, is as well calculated to awaken the intuition of it *in the consciousness*, as our ordinary contact with natural objects awakens the perception of their physical qualities."†

Again, no sooner has the perceptive consciousness become developed, than man, long before he has attained to the utterance of articulate speech, is able intuitively to interpret the tones, gestures, and expressions of emotion, and becomes sympathetically affected by them. Nay, more, an intuitive apprehension of *right* and *wrong* is attached to certain actions, and evidently *precedes* in his mind any distinct comprehension of the language by which moral truths are conveyed. The blush

* Sedgwick's Discourse on the Studies of the University of Cambridge. Fifth edition. Preliminary Dissertation.

† Morell's Psychology.

upon the cheek, and the early sense of shame, come before there has been any trains of thought as to the consequences of crime or misconduct. In the expressive language of Lord Bacon—"The light of nature not only shines upon the human mind through the medium of the *rational faculty*, but, by an *internal instinct*, according to the law of conscience, which is a sparkle of the purity of man's first estate."

So, again, "closely connected with the *moral*, are the *religious* intuitions of the soul. These are developed more or less distinctly amongst the earliest of our human sentiments, in the form of *awe*, *veneration*, and *reverence*, which are inspired by objects of sublimity, grandeur, vastness, and mystery. In process of time, other elements—first the mental, then the moral—are joined to the primary intuition, until at length we reach the elevation of an intelligent, voluntary, and cheerful dependence upon an Infinite and All-perfect Being."*

And thus we see that the original sources or germs of the elements of all his knowledge lie within the region of immediate experience in the perceptive consciousness. All knowledge consists in the perception of truth, and "*truth in the agreement of the sign with the thing signified*;"† and hence it follows that the elements of knowledge are so many and as different as are the various fundamental truths, intellectual, moral, and religious, which they embody. But in all our psychological investigations we must never lose sight of the important fact, that the human mind, from its earliest existence, comprehends *implicitly*, and that, too, in the very nature of its existence, *everything* which its interior nature is calculated afterwards to develop. These germs, or essential elements, as constituent endowments, exist in every *mens sana*, *implicitly*, from its earliest existence, and they are one and all evolved *explicitly* through the perceptive or intuitive consciousness.

True it is, that by no training or culture can we create a new faculty, any more than we can invent a new law of nature, or give a new organ of sense. But, nevertheless, it is equally true that the germs (so to speak) of all our mental activities, intellectual, moral, and religious, *are present from the first*, and they are all evolved through the perceptive consciousness, with the collateral development of the vesicular matter of the cerebral organs, through which they are manifested throughout the totality of life; at first, in merely an instinctive and impulsive manner, and in the order and succession in which each specific form of mental activity is roused into prominent and effective operation, *by virtue of its reaction with the external world or*

* Morell's Psychology.

† Dr. Wollaston's Definition of Truth.

nature. To Mr. George Combe* belongs the honour of having first clearly demonstrated that the harmony which exists between the constitution of external nature and the mental constitution of man, is an all-pervading principle of creation, and a perfect and beautifully symmetrical system; and by bringing into one point of view the different constituent elements of the human constitution, and showing their relations to each other and to external nature, he has thrown a flood of light upon the phenomena of human life, and has indisputably established, the fact, that the world, throughout its constitution, is framed in admirable adaptation to the faculties of man, as an intelligent, a moral, and a religious being.

We have seen that the mind, like the body, passes through its phases of development, and that at birth man is the mere creature of sensation and instinct; for in the earliest stage of his psychological progress, the *intelligence* is purely sensâtonal, the *feelings* simply those of pleasure and pain, and the *impulses to action* innate and instinctive. The senses, indeed, come into play from the moment of birth; for as the human infant nestles in its mother's bosom, *smell* is its guiding *sense*, and it is through *taste* that it satisfies its first instinctive want or craving. But from this state of isolation and subjective feeling, in which the mind may be said to be virtually passive, it gradually rises to the higher phase of development which we are now considering, of intuitional or perceptive consciousness,—a state of increasing activity, in which a degree of mental attention is necessarily evoked, and where the idealized impressions are retained in the memory, as *representative ideas*, with a measure of tenacity commensurate with the attention bestowed. For no sooner does the perceptive consciousness begin to dawn, than in the child's mind the image of its mother becomes associated with its idealized impressions of smell and taste; so that at the sight of her its little heart bounds with pleasure, and its joyous emotions are as evident to all, as its loudly-proclaimed disappointment makes itself understood when denied the gratification which its instinctive and inherent feelings crave.

When we view man, indeed, in his threefold capacity of a social, a moral, and an intellectual being,—and, accordingly, as endowed with intellectual faculties, with propensities and affections individual and social, and with moral and religious feelings and sentiments,—we cannot avoid the conclusion that *idea-tion is the first step in his intellectual progress*, nor that he is admirably fitted in all his capacities for the natural world without, and for the social conditions in which his Creator has placed him.

* *Vide* The Constitution of Man, considered in relation to External Objects, by George Combe.

Ideas are the pabula of thought, and form equally a constituent element in the *composite nature* of our animal propensities, and of our emotional and moral feelings.

Ideation is as essential to the very existence of memory, as memory is to the operations of thought. For what, in reality, is memory, but the fact of *retained idealized impressions* in the mind? And without these retained idealizations, embodied in the memory as *representative ideas*, where are the materials of thought, and how are the processes of thought to be effected? True it is, that the agency of volition is alike essential to memory; for unless the attention of consciousness, by an act of volition, be arrested, or directed and fixed upon the object, the *idealized impression* may be so evanescent and transitory, that, "like the baseless fabric of a vision," it may leave not a trace behind it.

I have advanced the opinion, that the basement convolutions of the cerebrum—the *great internal*, as the portals of intellectual action, are the central organs of the perceptive consciousness where *ideation* is affected. And we have noted the fact, it is only in man that they exist in their highest state of development, and that their connexions with the primitive convolutions in the anterior, middle, and posterior lobes of the brain are so multitudinous; commensurate, in my opinion, with the psychological importance of their office, as the central organs through which the other perceptive organs, intellectual, moral, and religious, are reached and associated.

The development and relations of these basement convolutions are in accordance with the extent and range of the perceptive faculties of the animal, and may be fairly taken as a criterion or measure in fixing its place in the scale of being. The true difference between man and the inferior animals rests specifically and fundamentally on the *greater number* and *higher nature* of his psychological endowments. They have many cerebral organs in common; but there are others which he possesses, of which they are altogether destitute; and this constitutes the immutable distinction between him and them. We know that it is only the anterior lobes of the brain which exist in fishes, birds, and reptiles, and that the middle lobes do not make their appearance until we ascend to the mammalian class. And hence how limited in number are the cerebral organs and psychological endowments of these animals, when compared with those of man; and hence, too, the important induction, that the psychical faculties which they do possess and manifest are attributes of—for they must have their material organs, their local habitation and abode, in—the *anterior lobes* of the brain. Now, all these animals, besides their dominating instincts of

self-preservation and of *reproduction*, have, in common with man, the sensory ganglia and organs of the special senses, the internal or basement convolutions, though necessarily limited to the anterior lobes, some of the super-orbital and other convolutions at the basis of the brain, with a rudimentary and varying degree of anterior development. But they are alike destitute of that frontal, towering, and expanded development, and of those exalted intellectual endowments which are *the sole prerogatives of man*. They all more or less manifest the essential phenomena of the perceptive consciousness, ideation and its associates, memory and volition, emotional impulses and feelings, and, amongst the highest of the order, some traces of ratiocination. The melodious notes of the sylvan songsters attest indisputably their possession of the *organ of tune*, in common with man; the varying strains of the mocking bird and the articulatory exhibitions of the parrot, are equally conclusive of the presence of the *imitative faculty*, while the building of their nests speaks for the *constructive instinct* of the tribe. They have all an intuitive perception of external individualities, and of some of their physical adjuncts. In the mere perception, indeed, of external objects by sight, and in that of some of their sensible qualities by touch, or feeling, smell, and taste, man, standing on the same platform, is inferior to some of the lower creation. He has neither the far-seeing eye of the eagle, nor scent-smell, of the dog; but in the apprehension of the intimate structure and chemical composition of substances, of their properties and mutual relations, as well as of the adjuncts of physical objects—as of space, form, size, weight, colour, number, and order—how immeasurably he rises above their level, by virtue of the greater development and higher endowment of the cerebral organs which they have in common in the anterior lobes, and of others in the same lobes, which he possesses, but of which they are altogether destitute. Thus the dog, looking at an open printed book, sees the book itself, as an external object, just as clearly and as plainly as his master does, but he has no apprehension, nor can he be made to apprehend the things therein signified by the printed symbols. To him they are dead letters without meaning. His intuitive perception of individualities—his knowing his master, and perceiving the book, and his power of distinguishing between persons and objects, confer upon him the capability of a narrow education; while in man, with his intellectual endowments, the ideation of individual existences “yields that insatiable curiosity, that restless thirst for universal knowledge, which exhausts the mineral, vegetable, and animal kingdoms, imbibes all the informa-

tion this diversified globe can supply, and impels him to scale the heavens, and take note of the wonders of the starry infinite."*

So again, in reference to the adjuncts of external existences, the organs of form, size, weight, and colour, in association with the central organs of the perceptive consciousness, "enable the inferior animals to distinguish individuals, and to know familiar objects from strange, to preserve their own equilibrium, to take pleasure in each other's striped and spotted skins, or splendid plumage; but in man, these perceptive powers stimulate to new creations. The impulse of form, aided by still higher faculties, shapes the marble into beauty, and almost inspires it with life,—that of colour, under the guiding hand of genius, flashes its creations upon the canvas, and brings back to our admiring eyes, in all their living energy, from times long past, deeds of heroic adventure, or the hallowed displays of divine benevolence."†

So, too, in his perception of the changes in external objects, of the phenomena of action, of *events* and their adjuncts, *time* and *place*, how immeasurably is he raised above them,—comprehending in its fulness the revolutions of the earth itself, before history had a name, and the history of his own species in every portion of the globe. In fine, through the instrumentality of those exalted intellectual endowments peculiar to man, and which have their acknowledged seat in the anterior lobes, "adorning his brow like a diadem," the faculties of calculation, of order or arrangement, of comparison and causality, of ideality and wonder, he can number the stars, and with instruments furnished by the higher mathematics, can weigh and measure the planets, assign their courses and times, mark out the path and anticipate the coming of comets, calculate the distance of the most distant nebula, and only terminate his investigations in the inaccessible depths of infinitude. He arranges every object that comes within his cognizance, whether material or mental. He perceives resemblances and differences, abstracts and generalises, analyses and combines, compares and infers, and "ascends from nature up to nature's God." From *ideality*—the imaginative faculty, the vivifying soul of music, poetry,

* Memoirs of Dr. Spurzheim, by A. Carmichael, M.R.S.A.

† *Colour Blindness*.—At a *post-mortem* examination of Dr. Dalton, Mr. Bally (formerly assistant to Dr. Spurzheim) pointed out an *imperfect* or *deficient* development of the convolution of the anterior lobes, the site of the organ of colour. "Here, then," says Dr. Wilson, "according to the judgment of those present, there appeared a marked deficiency in that portion of the brain which phrenologists regard as the organ of colour, in the person of the most famous example of *colour-blindness*; and though he were not famous, his case would deserve record, as the solitary one where the brain itself was examined."

Researches on Colour-Blindness, by Dr. George Wilson, F.R.S.E., page 106. 1856.

and eloquence, refining, exalting, and dignifying every object susceptible of improvement—springs his sense of the *beautiful*; and from *wonder*, that of the *sublime*.

But reverting to the animal and moral nature of man, the fact is equally manifest, that ideas form a constituent element in the composite nature of the animal propensities, and of our emotional and moral feelings. Dr. Carpenter has clearly pointed out the distinction between propensity and instinct, and has shown that in the former, *ideation* is involved. "Instinct," says he, in his able analysis, "is an expression for a certain series of phenomena directed towards a given purpose, but not really involving any other physiological or psychological actions than sensations and respondent movements; whilst *propensity* is a *desire for gratification, involving an idea of the object*."

Among the personal affections of the Ego, the *love of life* is paramount, and around it are marshalled and associated those instinctive and inherent activities, or animal propensities, subservient to the defence and conservation of existence.

The instinct of *self-preservation* is an universal instinct, and the very first that is roused into action. To it all the special senses are necessarily and of course subservient; but first and foremost are those of smell and taste. It is the sense of smell which attracts and guides the human infant to the mammary gland of its mother, to satisfy an *internal want or craving*. Hunger and thirst, as instinctive and internal cravings or feelings, are implanted by the Author of nature, to use the words of Prochaska, in accordance with the "*lex nostri conservatio*;" and, as subjective sensations, they have their immediate seat in the vesicular nervous tissue of the stomach and mouth.

But the *propensity for food*—and in hunger we have both *appetite* and *desire*—involves for its gratification both *sensorial* and *psychical* agency. We all know by experience how a savoury odour will cause the mouth to water; but is it not equally true that the very thought of it, the mere recollection or recalling of the idealized sensation, will produce the same effect? To ensure the gratification of the propensity, and to satisfy the desire for food, befitting means and modes are to be devised and adopted; and these as assuredly involve and necessitate the agency of *ideas*, and in their execution, in the adaptation of means to ends, the active exercise of intellectual faculties.

We have seen that, in subserviency to the instinct of self-preservation, the sense of smell is *primordial*; and it is interesting to follow up the cerebral connexions of the olfactory ganglia, and to note that the peduncles are not only in commissural connexion with the great centres of sensorial feeling, the *thalami optici*, and with the *ourlet of Foville*, where the

sense is *idealized* and *registered*, but with those primitive and basilar convolutions of the cerebrum which surround the *fissura Sylvii*, and are coeval in point of existence with the fissure itself.

"Each ganglion of the olfactory nerves is connected with the hemispheres by a long, narrow *commisure*, lodged in a triangular-shaped groove, and passing backwards, till opposite the *fissura Sylvii*, where it splits into three divisions; the most external of these, distinctly medullary, runs down the *fissura Sylvii*, to be connected with the *anterior extremity* of the *middle lobe*; the internal is connected to the *posterior internal surface* of the under part of the *anterior lobe*; and the middle, which is the shortest, and, strictly speaking, no more than the internal portion of the external, is connected with the *posterior edge* of the *anterior lobe*."* And thus by the earliest and guiding sense to the instinct of self-preservation, from its cerebral connexions in the encephalon, are we not also guided and led in our psychological researches to the *allocation* or seat of the psychical organ in hemispheres of the *alimentative propensity* in man?

Closely associated and interwoven with the *love of life*, and besides those immediately subservient and required for the mere support and conservation of existence, there are other active and definite animal propensities common to man and the lower animals. There is the instinct of *self-defence*,—the *combative propensity*,† for the protection of life; and the *destructive*, to provide for its sustenance; there is that of *cunning* or *secretiveness*, to lie in wait for the prey, or to elude the pursuer; that of *fear* or *cautiousness*, to shrink back from the encounter; and that of *courage* or *firminess* to face it openly. There is the *propensity to hoard food* for future use, and the *constructive ability* to provide for it a storehouse.

* Solly On the Brain, p. 286, 2nd Edition.

Dr. Andrew Combe has recorded an interesting case in which the *love of life* was a ruling passion of a lady upwards of sixty years of age, and in whom there was found, at the *post-mortem* examination of the brain, "an enormous development of one of the convolutions at the base of the middle lobe, so striking as to arrest instant attention. The corresponding part of the skull," says Dr. Combe, "showed a deep and extensively-moulded cavity or lid, running longitudinally, with high and prominent sides, and presenting altogether an appearance much more striking than in any skull I ever saw. Whether it may have any connexion with the love of life, is a circumstance which may be determined by future observations."—*Phrenological Journal*, vol. ii.

† Mr. Combe was present at the *post-mortem* examination of an old gentleman, who had long been remarkable for the mildness of his disposition and the courtesy of his manners, until suddenly, about four years before his death, he became irritable and violent in his temper. From being kind, gentle, and civil to his servants, he became irritable, excitable, and passionate. "In the left posterior lobe of the brain a cavity was found, two inches in length, lined with a yellowish membrane, into which blood had been effused and afterwards absorbed. Its centre was on combativeness, but it extended also into adhesiveness, and a small portion into philoprogenitiveness. The corresponding portions of the brain on the opposite side were sound."—*Combe's System of Phrenology*, 5th Edition, 1853, p. 252.

Again, besides these, there are the higher instinctive activities—the love of self, or *self-esteem*—the love of others, or *benevolence*—and the love of approbation; but these, although not exclusively human, are only found among the higher order of social animals. Now, to be satisfied that these are *primitive*, *distinct*, and *inherent* animal activities, all involving *ideation*, and roused into activity and exercise through the perceptive consciousness, we have only to appeal to nature. And the allocation of the cerebral organs of these activities by Gall and Spurzheim in certain primitive convolutions of the cerebrum at the base, surrounding the fissura Sylvii, and at the sides and upon the hemispheres, is not without the support of pathological evidence. And it is, if I am not greatly mistaken, to *post-mortem* examinations of the brain, and to pathological investigation, more than to any other source, that we are to look, not for the discovery of normal functions, but for evidence in support or refutation of the dogmata advanced by craniological observers. Such is the course I have kept steadily in view, and pursued with great interest, and not without advantage, in my limited field of observation.*

Throughout the whole creation, next in importance to the *love of life*,—the *instinct of self-preservation*, is that of *generation*. These are the two dominating instincts in nature. Locating, as I do, with Serres, the sensory ganglion of the sexual instinct in the median lobe of the cerebellum, as the result of personal observation and pathological research, it is highly interesting and instructive, in consequence of the direct commissural connexions of this sensory ganglion with the centres of emotional feeling, and through them with those of intellectual action, to trace the development of the composite character of the amative propensity in man, and to note how the instinct of

* In a case of tubercle of the brain, in a child, where the deposit was upon the superficies of the hemispherical ganglia, the psychological phenomena were most significant, and the sole indication of the local seat of the disease. At the *post-mortem* examination of the brain, the tubercular deposit was found to be situated on that part of each of the hemispheres of the brain where Gall and Spurzheim have located the *organ of firmness*. For some time previous to his illness, the parents of the child had been forcibly struck with a change in the disposition of the child, which they had observed for some time to be gradually taking place. From being a happy, placid, and docile boy, he had become more and more petulant, self-willed, and obstinate, very determined to have whatever he set his mind upon, and not to be driven from his purpose; in a word, he had become a most obstinate and self-willed boy. So marked, indeed, was the change of disposition, that it had become a subject of serious consideration with them, whether it was to be attributed to some latent disease under which he might be labouring, or to mere infirmity of temper. But as he continued to eat, drink, and sleep well, and did not appear to be suffering from any bodily complaint, they contented themselves with endeavouring to correct by moral management and discipline, what they were inclined to consider rather an infirmity of the mind, than of the body. I brought the case under the notice of the Royal Medico-Chirurgical Society. It was read, June 14, 1842, and published in vol. xxv. of the Society's Transactions.

propagation—one of absolute necessity—becomes a principle in our moral constitution, connected and associated with all our moral responsibilities, whilst, “at the same time, it furnishes materials for the imagination, taste, and perception of beauty.” But in man, with the amative propensity, is inseparably associated and interwoven that of the *love of offspring*, of the *family circle*, and of *home*, knitting together in the bonds of affection, husband and wife, brother and sister, friend and friend. For, in accordance with high behest—“*Be fruitful and multiply, and replenish the earth*,” the social affections bind family to family, and nation to nation, in one bond of universal brotherhood. Man is a social being, and the *love of society* or *propensity to associate* is inherent and instinctive. But among the lower animals, as I have already observed, the attachment of the mother to her offspring, however great for the time, is limited to the period of its infancy and helplessness; between them, in after life no endearing relations are observed to subsist. Now, why is this? Clearly and obviously because they do not possess, but are actually destitute of, the organs and faculties which administer to such relations.

For, of the posterior lobes of the brain, among the inferior animals we do not meet with the least vestige until we ascend to the carnivorous group. In the fulness of their development, these lobes essentially belong to the family of man, and are the great centres and seat of the psychical organs of his social propensities and attachments, and of the human affections.* Among monkeys and other anthropomorphous animals, there is a considerable development of the posterior lobes; and these animals are especially distinguished for attachment to their young, and for their social propensities; but, in them, they do not cover and overlap the cerebellum, as in man. Their great elongation backwards, and full development in the human brain, have led Professor Retzius to divide the whole family of man into *dolichocephalæ* and *brachycephalæ* in proportion to their breadth; and this division is not without psychological import among the races of man. Closely allied with the social propensities and human affections are the emotional states, and in them ideation is equally

* Mr. Combe mentions the case of a gentleman who died in Edinburgh, in whose brain “there were found at the *post-mortem* examination twenty-seven abscesses, of which eleven were in the cerebellum, and ten or eleven in the posterior lobes. There was only one in the anterior lobe devoted to intellect, and one was situated in the organ of tune, on the left side. He had made his will two days before his death, and to his physicians, his mind seemed to be entire. His brother, however, assigned as the reason why he desired the brain to be examined, that he had observed, that before his death, the deceased had manifested an almost *total loss of affection* for his wife and children, to whom, when in health, he had been tenderly attached. The coincidence between the seat of the disease, and the decay of the domestic affections is striking.”—*Combe's System of Phrenology. Ante cit.*, p. 243.

involved; for, alike in the composite nature of each and of all, there is present an *intellectual element*, as well as *sensorial feeling*. Emotional is essentially different from common sensibility. We cannot identify hopes and fears, joys and sorrows, with the simple elementary feelings of pleasure and pain. The emotional differs from the sensational consciousness: they are distinct mental states. Still, the simple, elementary emotional sensibilities and impulses, like the instinctive feelings, are strictly consensual, and have their seat in the sensory ganglia; and as automatic functions of independent nervous centres, they may be brought into play through purely sensational channels, without the agency of volition or thought. Thus, laughter—the *expression of joyous emotion*—when excited by titillation on the surface of the body, is simply and strictly a *consensuous act*, as much so as the smile that mantles on the infant's countenance from the effects of flatus or some internal excitation. But the true emotional feeling involves ideation; and such is Laughter, "holding both her sides," when provoked by the presence of ludicrous ideas in the mind. In the one case, the physical impulse upon the surface passes *upwards* to the thalami optici; in the other, the ludicrous ideas are transmitted *downwards* from the centre of intellectual action in the cerebrum to them; and alike in both the motor impulses are instantly evoked, and the expression of the joyous emotion elicited. These facts were strikingly exemplified in the young woman's case to which I have more than once alluded; for at the time when her mental faculties were completely benumbed or paralyzed, and the only avenues open to emotional sensibility were those of sight and touch, through either of these channels feelings of fear and alarm, of terror and fright, could be instantly excited, with convulsive shuddering. And again, when she had so far recovered the power of ideation and observation as to perceive that her lover was faithless and paying attention to another, her emotional sensibility received a shock in another direction. She was *wounded in her affections*; jealousy was aroused; and the catastrophe followed, which, fortunately for her, proved salutary.

And thus we see that the two great centres of emotional feeling in the encephalon—the thalami optici and corpora quadrigemina, placed midway between the cerebrum and the external organs of sense, may be played upon and roused into action through either, from below or from above; *upwards*, from the *outer world*, by the appropriate stimulus upon the nervous vesicular expansion of each of the external organs of sense; *downwards*, from the cerebrum, from the *inner* or *psychical world*, by the flow of our thoughts, and the workings of

ideo-dynamical, emotional, and moral agencies in our cerebral organs.

But the elementary emotional feelings and motor impulses, excited into action by impressions from without, bear the same relation, in the absence of the psychical element, to the true emotions, which the instincts do to the propensities.* Ideation is the connecting link—intermediating between the two extremes of mental action, emotion, and volition—between the inherent elementary emotional sensibilities on the one hand, and the operations of thought and volitional power on the other. As an intermediating and connecting link between emotion and volition, it is sometimes in subordination to the one, and sometimes to the other.† This is a point needing no illustration; but

* It is greatly to be regretted that *perversions* of the *emotional feelings* should have met with such little attention in pathological researches.

† “During the past year, an interesting *post-mortem* examination came under my observation. It was the case of a little girl, aged eight years, who died on the eighth day of the attack, from effusion at the base of the brain, with softening of the pons Varolii. The manner of her death was very characteristic of the local lesion; but the point of present interest was her impulse and emotional character while living. It was the theme of remark, and a matter of common observation, to all who knew her. I have never met with a more impulsive, excitable, curious, old-fashioned, and shrewd little girl, in the course of my life. I have watched her progress from infancy. She had a large head, and fully-developed convolutions; but the size of the thalami optici was such as to rivet my attention, from their unusual magnitude and healthy appearance. I hope others will bear the comparative development of the thalami in remembrance in all cases where the impulse to emotional excitement has been characteristically great. Attention to this point is important, since it is only from multiplied observations that a safe and sound induction can be made.”—*Physiological Psychology*, p. 68.

A striking instance of the dominant power of emotional apprehension—the *sheer dread of bodily pain*, in upsetting the balance of the mind, in the case of an intelligent, but highly impulsive and excitable lady, came under my notice in the summer of 1848. From that time, until within eighteen months of her death, which took place at Hornsey in the autumn of last year, she was under my observation. I was not apprized of her death until after she had been interred, which I sincerely regret, for no *post-mortem* examination was made, and there was an interest attaching to her case, in my mind, which nothing short of a knowledge of the pathological condition of the brain could satisfy; and besides which, it was her own often-expressed wish to myself, to have her head examined after her death.

She was the daughter of a man of some public and political notoriety in his day,¹ and was begotten and born in the midst of a stormy period of her father's life. Between the ages of her parents there was considerable disparity. Her father was many years the older of the two; and during the period of utero-gestation, her mother was the subject of great alarms and troubles, and underwent much anxiety and mental agitation. I mention these circumstances, because I think, with Dr. Latham, that, “prior to diseases, their diagnosis, their history, and their treatment—prior to them and beyond them, there lies a large field for medical observation. It is not enough to begin with the beginning. There are things earlier than their beginning, which deserve to be known. The habits, the necessities, the misfortunes, the vices of men in society, contain materials for the inquiry and for the statistical, systematizing study of the physician, fuller, far fuller, of promise for good to mankind, than pathology itself.”²

When first called upon to see this lady, she was some months advanced in preg-

¹ Samson Perry, of the *Morning Chronicle*.

² Dr. Latham, *On Diseases of the Heart*.

even among the lower animals, those which habitually associate with man, it cannot escape observation that an intuitive compre-

nancy with her second child, and I soon found that the parturient state was the source of great mental uneasiness and discomfort to her. In consequence of the bodily pain and suffering which she had undergone at her first accouchement, she was looking forward to the next with fear and apprehension. So deeply, indeed, was the recollection of the first impressed upon her mind, that no sooner was she sensible that she had again conceived, than she became despondent and full of fear; nor could she bear the sight of the gentleman who had attended her in her confinement. His presence, associated as it was in her mind with her former suffering, made her quite miserable. It was in vain that I attempted to reason away her fears; they seemed to increase upon her as gestation advanced. The fear of bodily pain in prospect, the physical pains of labour, marred her present comfort, and rendered her quite unequal to the discharge of the relative duties of life. It was a kind of *monomania* with her—the dominant and depressing feeling of her mind. I found that positive assertion had more effect than reasoning or persuasion with her, and after a consultation with her husband, I assured her that she should be rendered insensible to pain when her labour came on. She was comforted with the idea; but I was not so comfortable, for I felt that I had promised more than I could perform. Ether and chloroform, as anæsthetic agents, were then unknown. She requested me to give her a written assurance that I would do this, which was done without a moment's hesitation; and this promise, up to the time of her delivery, she wore in her bosom, inclosed in a little silken bag. It was to her a talismanic charm. Whenever the desponding fit came on, and fear oppressed her, she read my promise, and was comforted. In this way, she got through the period of gestation, scarcely a day having passed without its being read. As soon as she was taken in labour, I was immediately summoned. I took with me an opiate (Battley's sedative). I held up the bottle to her, saying, "Here is your dose, but I cannot give it to you yet; you must be in actual effective labour, otherwise it will stop, at least protract, the process." I left, giving strict injunctions to the nurse not to send for me again until she thought I was really wanted; feeling assured from former experience, and as the event proved, that her emotional fears would vanish as the labour advanced. She had a safe and easy time, and a quick recovery. All allusion to her former state of despondency was carefully avoided. She nursed her child, and quite regained, mentally and bodily, her usual health and strength. About twelve months afterwards, I had a morning visit from her; she was again *enceinte*,—smilingly she said, "I was very foolish last time, and now I am beginning to fear again; but I know I can be saved the pains of labour this time, and I come to ask whether you will give me chloroform." To this I readily assented, and with this assurance, and the prospect of immunity from pain before her, she went on more comfortably until her time was up. Then her labour came on so rapidly, that before I could reach the house, the child was born. A severe flooding followed; she was greatly exhausted, and had a very protracted recovery. She was weak for a long time, both in body and mind—depressed, and despondent.

Again she became pregnant, and during the period of gestation had a severe attack of toothache. The pain brought back all her fears and apprehensions; but, under the influence of chloroform, the decayed tooth was removed, and this gave her fresh courage. Hope revived, and, with occasional fits of depression and fear, she struggled on. In due time, and under the influence of chloroform, she was safely delivered; but she never recovered her former healthy tone of mind. She was excitable and irritable, easily put out of temper, and very despondent. With a view to the benefit of her health, she left London, and went to reside at Hornsey. Once more she became pregnant, and all her emotional fears and apprehensions returned, aggravated in degree, and of so alarming a character, that medical advice was sought for in her immediate neighbourhood, and eventually Dr. Ramsbotham was consulted. Interested in her case, he wrote to me, and we had some correspondence on the subject. Finding, or at least thinking, that her medical attendant had not had much experience in the administration of chloroform, nothing would satisfy her mind, but that she must be near me, that I might attend her in her accouchement. Accordingly, she came to lodgings in Norfolk-street, a month before her

hension of his emotional nature is acquired, which enables them at once and without hesitation to recognise its manifestations.

confinement. I saw her daily. She was in a state of monomania. Fear, the dread of her approaching accouchement, seemed to be never absent from her mind. I introduced my friend Dr. Snow to her. He gave her the most positive assurance that as soon as ever labour had begun, she should be rendered perfectly insensible to pain. Still she was full of fears: he might be otherwise engaged when she required him,—I might be from home, and she was quite sure that the agony of the first pain would kill her. Her mind was quite unsettled—she could attend to nothing; morning, noon, and night, the fear and apprehension of the bodily pains of labour in her mind were uppermost.

Fortunately, when she was taken in labour I was at home, and Dr. Snow was quickly in attendance. She was rendered completely insensible, and she had no knowledge of her child's birth until after it had been washed and dressed, when it was presented to her by the nurse. She seemed pleased that her trouble was over, but at first she could scarcely believe the fact. For the first two or three days, everything seemed to be going on satisfactorily; she was composed and quiet, and it was vainly hoped she would regain a healthy tone of mind, as she had done before. The event proved otherwise, for soon the *fear* of death took possession of her. The slightest bodily pain, any griping of the bowels from the effects of aperient medicine, or spasm from flatulency, produced a paroxysm of despondency and fear.

She lost all self-control. She took no heed or interest in her child. At first, for a few times, she attempted to nurse it; but the pain of suckling she either could not or would not endure. She said, the pain of nursing would be her death. It was in vain to attempt to reason with her on the groundless character of her fears and apprehensions. She did not appear to fear death in connexion with her own state in the world to come; but what she dreaded was, the *pain*, the *agony of the act* of dying. I had consultations on her case with Dr. Locock and Dr. H. Monro, and it was found necessary to have a female attendant from an asylum to be with her. At times she was violent, under excitement; but as she was easily controlled, private surveillance sufficed, and she was never removed from the care of her friends. From the connexion of her malady with the puerperal state, hopes were entertained, which were never realized, that ultimately she might regain a healthy tone of mind. She returned to her family at Hornsey, but neither mentally nor bodily was she ever again able to discharge the relative duties of life.

From this time I lost sight of her; but she was an invalid for the remainder of her life—the victim of illusionary ills and despondent feelings. "For the last three months of her life," writes Mr. Hands, of Hornsey, her medical attendant, in a letter which I received from him after her death, "I had to sustain a sinking and enfeebled frame. She was exhausted to the last degree; I never saw a frame so denuded of muscular and adipose substance. Life was sustained for several weeks on the smallest possible quantities of food. Her perceptions to the last hour of her existence were acute, and she often said she could not die, and seemed to think that the ordinary course of nature in her case would be reversed." But, "*Læx non pœna, perire*;" although with her it was the dread of the *pain* of the *agony* of dying which poisoned the cup of life. How interesting and how instructive in her case it would have been to have known the pathological condition of the thalami optici, where the association of bodily pain with emotional despondency, was so prominently though painfully exemplified!

I have at this time a lady under my care, with whom any emotional excitement is attended with the loss of the memory of words, and even of the names of common things. Her case is not without interest. She is about fifty years of age, the mother of a large family, and of an impulsive disposition. In June, 1855, the unexpected failure of the bank of Messrs. Strahan, Paul, and Co., in the Strand, where her husband usually had a very considerable balance of money, was suddenly told to her, and under circumstances which gave her nervous system a shock. Seeing her husband perplexed and annoyed, if not distressed, she bore up at the time, and suppressed the expression of her feelings; but the next day, when walking out with her daughter, at the corner of a street they suddenly encountered a noble.

But in man's moral and religious attributes the inferior animals do not participate. These are exclusively *his sole prerogatives*, constituting an immutable distinction between him and the whole brute creation, but, equally with his social propensities and the true emotions, involving *ideation* in their manifestation and progressive development. The moral instincts of right and wrong, and the emotional feelings of awe and reverence, come before all teaching, and are aroused in their respective organs through the perceptive consciousness; but intellectual agency is needed for him to apprehend and understand the *basis upon which moral obligation rests*, and to constitute "*religion a reasonable service*." The essence of his responsibility to God and his fellow-man has its foundation in the basis of his intellectual, moral, and religious nature.

Now, the transverse convolutions upon the upper surface of the cerebrum are *exclusively human*, for they are only to be found in the family of man; and the allocation, therefore, in these convolutions is no unreasonable procedure of the organs of man's carriage, as it was driving rapidly past them, and she instantly exclaimed, "*There goes the villain who has ruined and reduced us to beggary!*" She was then seized with a sudden giddiness, and all but fainted: immediately afterwards she began to talk quite incoherently, and it was not without difficulty that she was got home, when I was immediately sent for. It was some hours after the seizure before I was able to see her. She then said she "*was better, far better;*" but her mind was astray. She was evidently under fear and alarm, and did not understand what was said to her, or comprehend any question that I put to her, excepting the assurance that she was better. This assurance seemed to give her great satisfaction for the moment, but it was always followed by her saying, "*Are you sure? Oh yes! I am better, much better,—but are you quite sure? Thank God!*" &c. Her pulse was small, feeble, and irregular; the surface of body generally cold and clammy, and the forehead rather hot, but there was no complaint of pain in the head. An abiding sense of apprehension and depression of mind was a prominent symptom. On the following day, the pulse was more steady, regular, and had acquired more volume; but the face was rather flushed, and the forehead hot. An antiphlogistic mode of treatment, without depletion, was strictly pursued, under which she gradually improved. Her perceptive and thinking powers were soon regained. She knew where she was, and all the family about her, as well as myself; but the memory of words was for some time in abeyance. She could not recollect the name of any one, not even that of her own daughter, who was constantly with her—nor of the most familiar things in the house by which she was surrounded, as a chair, table, looking-glass, &c. She had a perfect recollection of past circumstances and events up to the time of her seizure,—understood anything that was said and done about her—felt deeply conscious of her own inability to recollect names and common words when talking—and at times such was her emotional sensibility in consequence, that she became annoyed and excited even to tears. In this case, it may be fairly inferred that the sudden shock to the nervous system in the first instance deranged the organic actions and normal co-relations of the emotional and intellectual centres. The giddiness and faintness consequent upon the *sudden outburst of emotional excitement* in the street, and indicative of disturbance in the balance of the circulation in the brain, was followed by delirium, and incoherent rambling *as a consequence*. The delirium was of short continuance, coherence of mind was soon regained, and the powers of thinking and reasoning were gradually though slowly restored; but there long remained, and there still exists up to this time, a manifest *dislocation* of the memory of words, to use an expressive term of Sir H. Holland, on the slightest emotional excitement or mental agitation.

those exalted moral and religious attributes or faculties which man *alone possesses*, and which raise him so high in the scale of being above the whole brute creation.

It was here that Gall and Spurzheim located the organs of the *moral sense*, or *conscience*, of *reverence* or *veneration*, of *awe* or *wonder*, and of *hope*, "which springs eternal in the human breast." And the allocation, founded as it was on an accordance of the external configuration of the cranium with observed mental manifestations, rests precisely on the same kind of evidence, on the same basis, as that which assigns to the high, towering, and expanded forehead *the organs of intellectual greatness*. I do not hesitate to avow my conviction, though my field of observation has been limited, that, so far as *outward* and *visible signs* can be taken as indices of the mental energy and power *within*, Gall, Spurzheim, and Combe have furnished the data and fixed the landmarks. It must be acknowledged that no one has studied the varying forms of the human cranium, with a view to their psychical significance, with so much care and attention, and on so extended a scale, as the illustrious Gall; for it was the labour of his life, and he was the founder of Physiological Phrenology.

The cranioscopic observations of subsequent observers, including Carus among the most recent, have all tended to establish the general positions of Gall. The fact, indeed, is indisputable, that the development of the cerebrum moulds and fashions, giving configuration, shape, and volume, with some well understood limitations, to its bony envelope—the skull, so that *craneoscopy*, is, in truth, an appeal to observation and to nature.

(To be continued.)

THE CASE OF MR. MILLAR.

(From the "Bucks Advertiser and Aylesbury News" of Oct. 18, 1856.)

It is little use to declaim against absolute authority unless we can also show that it has been misused. The pomp and show of authority may be very agreeable, but the actual work of administering the affairs of a public institution—such, for example, as the County Lunatic Asylum—is by no means to be coveted, and any one who will undertake the work and *do it well*, deserves the public gratitude. Instead of discussing, on abstract grounds, whether the County Magistrates are the most proper persons to be entrusted with the management of the county funds, and (what is of much more consequence) the administration of justice, we shall prefer to notice, from time to time, the way in which these duties are actually discharged. If the system is found to answer tolerably well, he would be a bold, rather than a wise man, who would seek to uproot it. If, on the contrary, the management of a great portion of the public business turns out to be as bad as it well can be, then discretion would seem to point in the direction of change. For the present, our business is with facts.

The Lunatic Asylum at Stone is under the control of a committee of twelve magistrates, elected by the Court of Quarter Sessions. The medical superintendence, since the commencement, has been entrusted to Mr. John Millar. Of this gentleman, personally, we know next to nothing, and, of course, have no special interest in his affairs, nor can we decide, of our own knowledge, whether he is a fit person for such an office or not. All we know about him is derived from the reports which have from time to time been made public by the Committee, and certain other official documents made public in a letter from Mr. Millar, to which we recently invited attention. It is clearly on record, under the signature of most of the gentlemen who now stand forward as Mr. Millar's accusers, that up to a very recent period, Mr. Millar's conduct in the discharge of his duties has been not only unexceptionable, but such as to entitle him to the warmest thanks of the Committee. If there has been a single dissentient voice, it has never been publicly raised. Of course it is abstractedly possible that, in spite of all this, Mr. Millar may be the most unfit man in the world for his post. We confess we do not think much the better of him for having enjoyed the favour of such worthies as these Visiting Justices appear by their subsequent conduct to be. But whether he deserved his high character or not, he was entitled to the benefit of it, at least to this extent—that if any cause of complaint arose, a fair latitude of defence should be allowed him, and the best construction put upon any doubtful matters. Instead of this, it appears that Mr. Millar has been subjected to a course of treatment such as we hope the magistrates are not in the habit of adopting in their judicial capacity. Possibly there may have been ample ground for dismissing Mr. Millar; but it is apparent from the statement of Mr. Millar—backed by the remarks made by Dr. Lee, as recorded in our report of the Quarter Sessions, that the causes of complaint, whatever they were, were never fairly investigated. Here is Mr. Millar's account of the judicial process which resulted in his dismissal:—

"At an ordinary monthly meeting of the Committee, held at the Asylum on the 15th of last August, a statement was made, without notice, by a member of the Committee, who has never been round the Asylum, who has not had any conversation with me respecting its management, and who has only been six months on the Committee. This statement led to the adoption of an abstract resolution to alter the duties of the chief officers. I was then called in, and the resolution was read to me, to which I offered no objection; and I was unexpectedly asked a few questions by the same member of the Committee, with reference to certain matters which appear in the subjoined statement, but without knowing what object he had in view. Portions of my answers were taken down by his direction, and after a very short deliberation in my absence, I was summarily told 'that the Committee had no confidence in my management of the Asylum.' *This was the first and only occasion on which I have had, publicly, or private'y, the most remote intimation of the existence of the slightest feeling of dissatisfaction with me.*"

Of course, under such circumstances, Mr. Millar could not but tender his resignation, which was immediately accepted, and though he afterwards wished to withdraw it, he was not allowed to do so. Here the curtain drops; Mr. Millar is dismissed, and we can only hope that his successor may not be unduly troubled with self-respect, or that he may be more fortunate in conciliating the favour of gentlemen who do not scruple to treat a professional man of high standing in this cavalier manner.

As to the matters alleged against Mr. Millar, we are of course in the dark. As they were not made known to him, of course he cannot inform us what they were. We can only guess at the grounds of dissatisfaction, from the nature of the evidence which Mr. Millar was *entrapped into giving against himself*, which will be found at length in his pamphlet; and on which we desire to offer no opinion. One of these charges relates to the employment of a patient in the chaplain's garden; another, and the most serious of all, would lead us to infer that a large discretion had been allowed to the attendants in the administration of the shower-bath. Mr. Millar's observations on these points seem reasonable enough, and if the Committee had chosen to offer any statement on the other side, we might judge between them. It does happen, however, that both these points are prominently referred to in an anonymous letter which has been circulated among the Justices, and which we should imagine to be the production of some underling discharged from the Asylum. This circular we know was read at one of the meetings of the Committee,—we believe at that referred to in the above extract. It must be deemed a very unwise proceeding to take the slightest notice of such a document, and it is not for us to say how much weight it may have had with the Committee. But as they pertinaciously refuse to give any account of their proceedings, the public must be content to suppose that, without any other authority than this trumpety document, they have taken so serious a step as the dismissal, without a hearing, of the chief officer of such an establishment.

If the Justices are wronged by Mr. Millar's pamphlet or by our remarks, they have only themselves to blame. They have been called upon for an explanation by those whose right they can hardly question. It is not merely the ratepayers—seldom mentioned in the court except as the subject of some vulgar jeer—whose curiosity would be gratified by some light on the interior of this costly establishment. It is not merely the “ribald” press that asks for some explanation. The Committee have been challenged in open court by one of their own number to defend themselves from a charge involving gross injustice and folly. They have been told by a magistrate whose official position gives double weight to his remarks, that such a measure would not be dealt out to the porter of a workhouse. In the face of these officials, Mr. Raymond Barker and the rest of the Committee preserved an insulting silence. We firmly believe to be the truth, that the facts of the case if fully known would do much more than confirm the worst suspicions to which so extraordinary a course must give rise.

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ART. I.—ON THE DEGENERACY OF THE HUMAN
RACE.*

MAN alone is a cosmopolite ; he alone inhabits the entire earth. Where the bear and the reindeer can scarce exist ; where the lizard perishes parched with thirst ; where the condor soars thousands of feet above the level of the sea ; and hundreds of feet below the surface, where the rat hardly ekes out a precarious subsistence, there man finds a home and flourishes. But whilst he thus asserts his authority over nature, she in turn sets her seal upon him ; and, according to the climate, the geological structure of the soil, and the ever-varying physical conditions with which he is surrounded, the primitive type becomes modified to produce the striking varieties in colour, form, and general physical, psychical, and moral development, which have been so often mistaken for irrefragable evidence of distinct origin. These are what are termed the *natural* modifications of the human race.

But under exceptional conditions the contest of man with the various elemental influences is partially unsuccessful, and he becomes *unnaturally* or *morbidly* removed from the primitive type. The same result is brought about by various circumstances attendant upon his nutrition, his social condition, his habits of life, hereditary influence, and many other causes. This constitutes a "*degeneration*"—defined by M. Morel as a "morbid

* "Traité des Dégénérescences physiques, intellectuelles, et morales de l'espèce humaine ; et des causes qui produisent ces variétés mialadives." Par le Docteur B. A. Morel. Paris. 1857.

deviation from a primitive type ;” and characterized by a tendency to further deterioration, to hereditary transmission, and to the more or less speedy extinction of that section of the race or community. And as in the natural modifications of type, there are certain forms occurring with *constant* relation to the causes in operation in their production ; so in the morbid deviations there are also certain forms, not occurring casually, irregularly, or interchangeably ; but marked by definite characters, and bearing constant and definite relations to their causes.

It is not alone the fact that the nervous system, in its double connexion with mind and body, is most frequently the victim of these degenerations, that lends a deep interest to this inquiry in reference to psychology ; but also that according to M. Morel, mental alienation in its various forms, but especially the chronic, is but the concentrated and final expression of degeneracy of race, wheresoever the chain of morbid phenomena commenced. “What,” he asks, “are in reality the asylums for the insane, but the concentration of the principal degenerations of the human race ?”*

Such is a brief abstract of the principles which receive illustration in this very able contribution to anthropology ; their special and important bearing upon psychology and practical psychiatry will be seen from the following remarks contained in the preface :—

“My constant desire has been (and is) to complete my labours upon mental alienation by a system of therapeutics designed to make generally available the means to prevent and combat this cruel affection. I very soon discovered, however, that the question was much more vast and complex than I could have supposed. I was compelled, therefore, to enter more profoundly into the study of nervous affections, as much in relation to their causes, as to their pathological transformations.

“My actual conviction is, that the insane of our asylums are, in the majority of cases, only the representatives of certain morbid varieties of the race ; modifiable, in some instances, irretrievable in others. Whatever may be the origin of their affections, they are all more or less marked with the characters of disease of long duration, in which dominates the redoubtable influence of hereditary transmission

“The incessant increase in Europe, not only of mental alienation, but of all those abnormal conditions which bear special relation to the existence of moral and physical evil in humanity, was also a striking fact in my investigations. Everywhere I heard physicians complaining of the increasing number of the insane, and of the more frequent complications which general paralysis, epilepsy, and a more marked depression of the intellectual and physical powers contributed to lessen the chances of cure.

"Add also, that neuroses, such as hysteria and hypochondria, frequently with tendency to suicide, attack now in fearfully increasing proportion the working classes and the inhabitants of the country, whereas they appeared formerly to be the special lot of the rich and surfeited class. Lastly, imbecility, congenital or acquired, idiocy, and other more or less complete arrests of development of the faculties of mind or body, indicate in greatly increasing numbers, the existence of individuals who receive in foetal life the principle of degeneracy.

"At the same time, statisticians reveal to us corresponding facts. The ever increasing number of suicides, of crimes against order and law; the monstrous precocity of young criminals; the degradation (*abâtardissement*) of the race, which, in many localities, can no longer fulfil the conditions required for military service; all these are undeniable facts, and show significantly enough, that the solicitude of European governments has been justly alarmed thereby.

"In presence of a moral and physical aspect so grave as this, I have been led to inquire whether the increasing number of the insane, or the more serious complications of their state, were not connected with the existence of general causes, modifying most seriously the present, and menacing the well-being of future generations.

"The necessary connexion of the causes of degeneration is no longer to me a matter of doubt. I cannot longer separate the study of mental maladies from that of the causes which produce fixed and permanent degenerations, the presence of which, in the midst of the healthy part of the population, is a subject of incessant danger.

"If this be so, the treatment of mental alienation cannot be regarded as independent of all the means which can possibly be made use of, to ameliorate the intellectual, moral, and physical condition of the human race."

With this extended view of the subject, M. Morel proceeds to examine into the various influences of climate, nutrition, social and moral condition, habits, &c., which appear to be exerting a baneful influence upon society in parts or as a whole; indicating the special forms of degeneration due to each individually; and also those which are due to mixed causes. The author's subject is susceptible of the following divisions:—

1. Original unity of the human race.
2. Influences producing natural modifications and morbid degenerations.
3. Degenerations due to poisonous agents—
 - a. Alcohol.
 - b. Opium.
 - c. Hachisch.
 - d. Tobacco.
 - e. Lead.
4. Degenerations due to imperfect nutrition, from
 - a. Diseased rye.
 - b. Diseased maize.
 - c. Exclusively vegetable and insufficient diet.
5. Degenerations due to hereditary influence.
6. Degenerations due to the geological arrangements of the soil, as *Cretinism*, &c.
7. Various mixed causes.
8. Curative indications.

What are we to understand by a degeneration of the human race?

Man is not the product of accident; nor yet the last manifestation of imaginary transformations. "Created to attain the end appointed by Infinite Wisdom, he cannot do so, unless the conditions which ensure the permanency and progress of the race, be more powerful than those which tend to destroy and deteriorate it." That there are elements of deterioration and disintegration at work upon humanity and life in general is a very widely spread belief. Bichat says, that such is the mode of existence of living creatures, that everything around them tends to destroy them. This is the expression of an antagonism between living and inert matter, which has formed the foundation for so many philosophical systems; some attributing all evils to unnatural social systems; others to the depravation of the moral sense; and others again to the original corruption of human nature. M. Morel takes no exclusive view in favour of any opinion, but considers the truth to be found in a combination of all.

"Placed in new conditions, the primitive man has experienced the consequences; and his descendants have been able to escape neither from the principle of hereditary transmission, nor from the influence of those causes which, by affecting the health, tended to remove them still further from the primitive type."—"These deviations have produced varieties, of which the one part has constituted races capable of propagating themselves with a persistent special typical character; whilst the other has introduced amongst the races themselves those abnormal conditions, which are to form the subject of our investigations, and which I designate under the name of Degenerations."—"These also have their distinctive characters and types, referrible to the various causes producing them."

"One of the most essential characters of these degenerations is that of hereditary transmission, but under conditions much more grave than those attending ordinary heirdom. Observation shows, that failing certain exceptional elements of regeneration, the offspring of degenerate beings present types of *progressive* degradation. This progression may attain such limits that humanity is only preserved by the *very excess of the evil*, and the reason is plain; the existence of degenerate beings is necessarily bounded; and it is not even necessary that they should reach the *last degree* of degeneracy in order to be smitten by sterility, and become incapable of transmitting the type of their degradation."

Varieties of the Human Race, and Formation of Degenerations.
—"The origin of the first deviations from the primitive type, was connected with the original necessity for man to harmonize external nature with the laws of his own preservation. This strife still everywhere continues; and man only exists on condition of constantly com-

bating noxious influences, and all the hurtful elements amidst which circumstances may have placed him."

Buffon says that three causes tend to produce changes in animal constitution—climate, nourishment, and domesticity. Allied as man is *physically* to other organized beings, he must necessarily be submitted to the same influences under certain limitations; but to attain just ideas we must in his case substitute for domesticity, the aggregate of manners, customs, education, civilization, and the like.

To these influences are due the modifications of type known to naturalists as the white, black, yellow, red, and brown races of men, all originally proceeding from one stock or species. (Buffon.)

The one great fact adduced in proof of this position is, that all the varieties can unite to propagate the race; and their progeny, however apparently dissimilar the parents, are fertile, and can continue the species. But this is only so far as regards the *natural* modifications of, not the *morbid* deviations from, the primitive type.

"The more profound is the degeneration, the more difficult does it become to realise this great fact of the possibility of transmitting the race. *Morbidly degenerate beings cannot form a race.* The continuity of a morbid variety (*variété malade*), such as that of cretins, depends on the union of the sound part of the population with those more or less profoundly affected with the poisonous influence."

The unity of race is no less important for the classification of disease than for the stability of the science of anthropology. Some direct analogical evidence as to modifications of primitive type is therefore brought forward to indicate the operations of the three great causes alluded to by Buffon, and the manner in which constitution and temperament are modified by circumstances, and even so as to produce disease.

Modifications in the Organizations and Instincts of Animals.—When animals are transported into a new climate, not only the individuals but the race require acclimatisation.

"Nothing is more curious than the successive changes produced in animals by domesticity and their return to savage life. Reduced to captivity, they not only lose many of their natural instincts and acquire new ones, but remarkable physiological transformations occur. M. Roulin relates in connexion with the introduction of pigs into Saint Domingo, that many of them escaped and became wild; and it is remarked that their ears have become straight again; their heads have become widened and elevated behind; and the colour, instead of those varieties met with in the domesticated state, is almost uniformly black. The same has been observed in other countries, where the pig returning to the wild state, has become in form, colour, and texture of hair like

the wild boar. A very important fact, in its physiological and hereditary bearing, is noticed with regard to the lactation of cows. The constant practice of milking these creatures during many generations, has caused the secretion of milk to become a constant function in the economy. In Colombia the abundance of cattle and sundry other circumstances have interrupted this habit of secretion; and in a very few generations the mammae have returned to the normal small size. Certain habits of progression are also hereditary, as the mode of walking of the Naragganset horse. In other cases instincts are developed and become hereditary through habit, as in the dogs that are brought up to hunt the peccari. Their young ones know instinctively how to attack this ferocious brute, whilst the offspring of untrained dogs are devoured in an instant. Barking appears also to be an acquired but hereditary habit. Wild dogs do not bark, but howl. The young of domesticated dogs bark even when removed from their parents early; but dogs which become wild after being domesticated lose the habit of barking, and howl again. The same is observed in cats."

Many other instances are given, but these are sufficient to illustrate the point in question, and to justify the deduction, that man himself is not unamenable to the powerful influence of physical agencies; seeing that he is a being composed of the same materials, and constructed on the same principles, as those over which he has dominion. Doubtless in the constant strife with the elements to adapt them to his constitution, the latter is modified in some degree, and thereby adapted to the particular circumstances under which he is placed. This within certain limits cannot be considered morbid, nor a degeneration. Hence arises another question, treated in the next section.

On the Difference between Natural Modifications which produce Varieties, and Abnormal or Morbid Changes, which produce Degenerations.—In the strife above mentioned, the constitution may be modified just sufficiently to adapt it to surrounding nature; but an exaggeration of these causes may pass on to what becomes degeneration. It is not always easy to trace the line of demarcation, but certain instances are here given in illustration. There are amazing differences between the Esquimaux who gorges himself with whale's blubber, and that "African starveling" who pursues the lion under a tropical sun; between the fisherman of the North, covered with seal-skin, and the hunter of the Sahara; between the luxurious Eastern and the energetic European. But these are all natural modifications to suit climate. The following is also an interesting example, quoted by M. Morel from M. D'Orbigny. It refers to the Incas or Quichuas, the type of whose conformation is very accurately drawn, and closely approximates to that of the Mexicans. It is unnecessary to enter upon more than one point. Notwith-

standing their very short stature, they are represented as having more massive forms than other tribes:—

“The Quichuas have very large square shoulders, and the chest is excessively voluminous, being arched and very long, so as to increase greatly the size of the trunk. In the women it is the same, and the throat is always large. . . . This is a striking organic fact; and is explicable on the principles of adaptation already mentioned. The plateaus inhabited by this race are always included between the limits of 2500 and 5000 metres of elevation (2750 to 5500 yards) above the level of the sea. At this altitude the air is so much rarefied, that it is necessary to take a much greater volume of it into the chest, in order to provide the system with a due amount of oxygen. During infancy, therefore, and the whole period of growth, the chest is developed irrespective of the growth of other parts. Confirming this theory, is the fact that the lungs themselves are altered in texture; the cells are enlarged, and, in consequence, the whole volume of the lungs is increased.”

The next instance brought forward is one in which we find man in the act of undergoing an actual organic change. “When men of the North,” writes Dr. Buchez, “emigrate to the Torrid zone, changes take place well worthy of attention. The general circulation is excited, the blood is diminished in quantity, and the arteries are less full. The circulation of the *vena porta* is increased, and a superfluity of bile is produced; the liver becomes enormous, and appears to supplement the respiratory function, as in foetal life. The muscular force has less energy.”

Both these instances are only illustrations of the natural modifications of structure and function, intended to adapt the constitution to exceptional circumstances. But these changes, similar in nature, may go on to excess, and become morbid. M. Melier says:—

“Visiting the village of Hiers, we saw children of twelve years old who appeared but six or eight, so puny and undeveloped were they. Their tint is not merely pale, but tarnished, and of a dirty grey; at once meagre in limb, and swelled in feature, they have only the belly developed; and they have almost all incurable congestions. For some time the canton (a marshy district) could not furnish the military contingent. It often happened that of all the men drawn for service, not one was found fit; sometimes none were found of age to be recruited—all had died, the most part in their infancy.”—(*Rapport sur les marais salants.*)

“In studying the action of the constitution of the soil upon man, we shall arrive at a point of degradation in which, according to some naturalists, he no longer suggests the idea of his species. He is not only imperfect but degenerate. Those who can still contribute to reproduce their kind, do it under condition of an ever downward pro-

gression. The more advanced are impotent; they present the type of *cretinous degeneration* in its extreme manifestation.”*

The remainder of the section is occupied by notices of the lowest forms of *natural* modification, such as the Hottentots, Bosjesmans, &c., as distinguished from the true morbid degenerations. The general conclusions are these:—

“We conclude then, that the intellectual inferiority found in certain races, does not necessarily involve the idea of a *morbid* state, as observed in true *degeneration*.

“Climatic influences have induced certain changes, certain typical characters, transmitted from one generation to another, and so produced the *varieties* of race. These varieties can mix with superior varieties, and, under favourable circumstances, can thereby ascend towards the more perfect type.

“The same is the case with intellectual manifestations. Their inferiority in this respect is not sufficiently general and permanent to permit the idea of distinct species. The intelligence appears merely dormant, and to be susceptible of cultivation up to the normal point of the race. The intellectual inferiority due to morbid degeneration of type is so distinct from that just noticed, that we are justified in adopting the following conclusions:—

“Between the intellectual condition of the lowest Bosjesman and the most civilized European, there is much less difference than between the same European and this degenerate being, in whom arrest of development is due to cerebral atrophy, congenital or acquired; or to any other cause inducing the morbid state which we designate by the name of idiocy, imbecility, or dementia.

“The first is susceptible of *radical amendment*, and his progeny may ascend to a higher, or even the highest type. The second is only susceptible of *relative* amelioration, and hereditary influence will *always* weigh upon his descendants. He will remain all his life what he is in reality, a specimen of degeneration in the human race, an example of *morbid deviation from the normal type of humanity*.”

The causes of degeneracy may be briefly summed up as follows:

1. *Degenerations by Poisonous Influences*.—These include marsh miasmata, and all the geological and climatic influences which tend to the production of hereditary cachexia; chronic poisoning by alcohol, by opium, tobacco, and various other narcotics.

2. Humanity is periodically condemned to certain scourges, which bring in their train fatal modifications of organism. Of these are famines and epidemics of various kinds, generally attended by, or consequent upon, extraordinary perturbations in the regular order of the seasons, and in natural phenomena.

3. Insufficient, bad, or exclusive nutriment impoverishes the constitution, and tends to the degeneration of the species. These

* M. Morel, p. 34.

produce certain special affections of an eminently deteriorating character, as Pellagra.

4. Another source of degeneration is the social medium in which man is placed.

"It is not enough for man to have conquered external nature; he must also strive with his internal nature, or rather the factitious nature imposed upon him by the social condition in which his existence is passed. The practice of dangerous or unhealthy professions; the habitation of situations crowded or insalubrious, expose the organism to new causes of decay, and consequently degeneration. In spite of the progress of science, it is impossible that he should not be modified by the evil conditions of a life devoted to certain manufactures, and the use of certain toxicant agents, or by the necessity of passing much of his life underground. Add to these general conditions the profoundly demoralizing tendency of misery, lack of instruction, failure of prevision, abuse of alcoholic liquors and venereal indulgences, and the insufficiency of nutriment; and we shall form an idea of the complex circumstances which tend to modify the temperaments of the lower class."

5. *Of the Degenerations which result from Infirmities either congenital, or acquired in Infancy*, M. Morel observes:—

"The child may be born with a brain incapable of fulfilling its functions, because it is atrophied or altered in its intimate texture, or because its bony case is formed so as to prevent its due development. Then, those functions of the organism over which the nervous system presides are performed in a vitiated manner. The child remains *degenerate*, because the instrument which is indispensable to the exercise of the human faculties only performs its functions imperfectly, or morbidly. He is affected not only as to the development of his intelligence, but as to that of the organism. . . . The child may suffer from hereditary disease, receiving, whilst in the womb, the seeds of degeneracy; or, without this, he may be exposed to convulsive or tuberculous affections early in life, which lead to the same consequences as congenital imbecility, or idiocy; he may also be subject to certain practices arising from ignorance, superstition, or other motives, such as compressing the head, to give it a form in accordance with certain singular ideas of typical beauty."

6. Blindness, and the deaf-mute condition are included in this brief enumeration of the causes of degeneracy, not as being so serious in themselves as some of the others, but because, in default of proper education, creatures so affected are certainly imperfect beings, and are likely to transmit some forms of imperfection to their offspring; though not necessarily their own deficiency. The fact of the existence of one hundred thousand persons so affected in France, is brought forward as a powerful reason for including some means of extended care over these unfortunate beings, in any system of general hygiene.

In the preliminary notice of degenerations in relation to hereditary influences, there are some observations too important to be passed over.

"We do not fear to avow that the principal interest which will attach to these considerations will arise from an exposition of the errors into which we have sometimes fallen in reference to certain forms of mental disease. Far be it from us to discourage those who are animated by the desire to do good to their kind; but we believe it useful to forewarn them against hopes most cruelly to be disappointed, if they do not keep in view, that hereditary tendency is not an isolated fact; and that the incurability against which often our best efforts are shattered, is but the fatal termination of a series of anterior existences, which are morbidly summed up and represented in one doomed individual. It is in the treatment of mental alienation that we have been exposed to the greatest deceptions. We have ventured to predict recovery, not having this aspect of matters in view, in acute cases; but calm has superseded the general disorder, and we have had to recognise that the individual had ceased to live intellectually. Numerous facts have proved to us that the incurability of these cases is not so much in relation to such or such a *form* of disease, but to certain hereditary influences, the study of which permits us to draw the following conclusions:—

1. There exist certain individuals who resume in their own person the morbid organic tendencies of many previous generations.

2. A development of certain faculties, sufficiently remarkable, may occasionally throw a more hopeful light upon the future of these individuals; but *their intellectual existence is circumscribed within certain limits which they cannot pass.*

3. The conditions of degeneration in such individuals reveal themselves not only by typical exterior characters, as smallness or malformation of the head, predominance of morbid temperament, anomalies in the structure of organs, special deformities, impotence, and the like; but also by the most strange *aberrations in the exercise of the intellectual faculties and the moral sentiments.*

Some general observations upon classification, and upon the principles involved in prophylaxis and hygiene, conclude the prolegomena. The following remarks are so forcible that we give them entire:—

"What are asylums but the concentration of the principal degenerations of the race? Because one is placed here as a maniac, an epileptic, an imbecile, or an idiot, he is not the less—in the majority of cases, if not all—the product of one or more of the causes of degeneration now enumerated. We, as physicians, better than others, are able to appreciate the influence of alcoholic excesses—of hereditary affections—of misery and privations—of insalubrious professions—of unhealthy localities. If, then, the causes of so much evil may yield before the efforts of the administrative authority, surely we are right to appeal to it. The influence which we can exert in our own depart-

ment is undoubtedly great, but still small when confronted with the great mass of incurable cases committed to our care. We must not, then, remain inactive contemplators of so many destructive agencies. Medicine alone can sufficiently appreciate the causes producing degeneracy of race; to it alone, therefore, it belongs to point out the positive indication of the remedies to be employed. I admit that the experience to be acquired in even a long career, scarcely would suffice to resolve a few of the problems proposed in this book; but I say, with the author of the *Introduction to the Science of History* (M. Buchez)—‘No one knows when his hour may come—no one knows if the idea which he bears may die with him. In this uncertainty only one part remains—to make haste, that when the night comes, our work may be done.’ ”

On Degenerations Caused by Poisonous Agents.—*On Chronic Alcoholism.*—M. Magnus Huss calls the disastrous effects produced by the abuse of alcoholic liquors by the name of Chronic Alcoholism. Entering the system in large quantities, it modifies fatally the constituent elements of the blood, and acts as a poison. The symptoms of this poisoning are those of alternate excitement and depression. Partial paralyses are but the precursors of more grave affections, which terminate finally in *general paralysis, deterioration and ultimate loss of intelligence*. The cadaveric lesions are correspondingly serious. But this is not the worst. The physical degradation, the complete perversion of the intelligence and the moral sentiments, do not remain isolated facts, terminating with the individual. There is no malady in which hereditary influence is so marked and characteristic. “If congenital imbecility and idiocy are the extreme terms of alcoholic degeneration, many intermediate states reveal themselves to the observer, by aberrations of intelligence and perversions of the moral sentiments, so extraordinary as to be unaccountable on the mere theory of warping of the moral nature. . . . It would be impossible, rejecting the data of hereditary influence, to account justly for many moral and physical monstrosities. Perhaps, placing ourselves in the scientific point of view of the question, we may be able to cast a new light upon intellectual conditions hitherto inexplicable, and to render a great service to legal medicine, to education, and even to morality, by assigning to the sad victims (personal and hereditary) of alcoholism, their true place amongst degenerate types.”

After entering somewhat extensively into the history of alcohol, M. Morel proceeds to describe the progressive symptoms of alcoholic poisoning. A case is detailed at great length, in which the following symptoms occurred progressively:—First, after ten or twelve years’ abuse of drinks, came on repeated attacks of delirium tremens; then habitually trembling hands; disordered

sensations, such as occasional blindness; trembling tongue, troubled sleep, disgust for all food; fornication and subsultus; trembling legs and, advancing paralysis; then partial anæsthesia, becoming complete in the fingers, toes, and inner part of the thighs; then vertigos and serious hallucinations. At this period a strenuous effort was made to stop the downward course, and for a little time successfully. Again the evil courses were resumed, and again the old train of symptoms occurred, with emaciation, and frightful cramps and spasms. Again a cessation of drinking, and again a relapse. The final condition is thus described:—

“Arrived at this sad period, there was no longer hope of amendment. Deprived of intelligence, lost to all moral sense, his strength diminished from day to day; and nothing could now arrest the progressive and fatal march of the symptoms. The skin became like parchment, the legs were œdematous, and the digestion profoundly troubled. The delirium, though continuous, had now no violent exacerbations. He muttered unintelligibly, his look was stupid and haggard, his appearance brutal; and when death came to terminate this sad existence, consciousness had long ceased. The paralysis was general, and this deplorable victim of alcoholism had fallen into the most hideous state of degradation.”

Alcohol, then, produces a malady presenting the symptoms of true poisoning, and one of a specific character. The only disease likely to be confounded with it is that known as “general paralysis.” The symptoms in general are trembling of the feet and hands, diminution of strength, paralysis, subsultus, cramps, and spasms. It is only in an after stage of the disease that convulsions and epilepsy occur.

In the nervous system we notice at first fornications, exaggeration of sensibility, and neuralgic affections; later, diminution of sensibility, perversions of the senses, and difficulty of speaking.

The circumstances attendant upon the generative function are peculiar. There is at first an exaltation, followed by depression, and finally extinction or impotency. Dr. Huss thinks that the same applies to women. It follows from this that, in general, hereditary influence is only operative during the earlier periods, when the function appears to receive an accession of vigour. Yet a precocious impotence seems to attack the succeeding generations; and thus, by a preservative law of nature, the degenerate race becomes speedily extinct. The offspring are not only afflicted with congenital intellectual feebleness; but along with this intellectual and moral degradation comes the impossibility of perpetuating the race, notwithstanding the normal development of the generative organs.

In the intellectual sphere of the nervous system the symptoms

coincide with those of the physical order. At first, a redoubled activity in the evolution of ideas; next, alternations of excitement and depression; finally, stupor. The acute symptoms, as shown in delirium tremens, are sufficiently familiar.

The symptoms due to other functions are—vomiting, furred tongue, diarrhoea, and flux. The liver is much disordered, and autopsy often reveals cirrhosis and atrophy. The kidneys are often affected with granular disease. The heart is excited to overaction, and hypertrophy is often the result, followed not unfrequently by fatty degeneration. There is also an alteration in the elements of the blood, which appears to abound in fat. The arteries are strikingly enlarged in calibre. (Huss.)

The most serious pathological lesions are rupture of vessels and extravasations of blood, producing apoplexy; atrophy, general or partial, of the brain—the former most common; serous effusions on the surface of the brain, or in the ventricles; opacity and thickening of the membranes, and adherence to each other and to the cranium.

The diagnosis between alcoholism and general paralysis is worthy of attention. In each there is a peculiar trembling of the hands, weakness of the lower extremities, feebleness of speech, &c. In alcoholism, these symptoms are said by Dr. Huss to cease when the cause is given up; and, even without that, there are occasional diurnal remissions never observed in the simple progressive paralysis. In this latter, the affections of the sight so common in the former are not observed, nor the characteristic formications in the extremities. The phenomena of digestion afford a very striking distinction. In alcoholism they are always much disturbed; in paralysis the appetite is normal, or increased to voracity. There are likewise differences in the mode of invasion of the insensibility, and in the nature of the hallucinations and delirium.

“Whether general paralysis, which terminates the life of so large a proportion of the insane, be *always* induced by excess of alcoholic drinks, it is not necessary here to examine; or if these excesses have contributed their quota of destructive activity to the already existing nervous malady; but it is certain that our asylums contain always a large proportion of cases having no other traceable origin. Out of 1000 cases, the details of which I have collected, there were 200 in which no other cause existed.” (M. Morel, p. 109.)

There are different varieties of alcoholism observed in our asylums, according as it is induced directly in the individual, or inherited from the parents. In the latter case, the victims have come to terminate their days in the last convulsions of general paralysis, and in a state of the most profound moral and physical degradation. The former class, *removed earlier from their evil*

courses, pass an existence but little more enviable ; of which dementia, stupor, the absence of intellectual vigour, and the abolition of *all moral sentiment*, form the prominent characters. This class is very numerous. There is no special delirium ; their existence is automatic ; the only wish expressed is to escape, and resume their vicious excesses. General paralysis is not ordinarily the termination of this class of cases—they present many of the characters of alcoholic poisoning, stopping short of that series of progressive lesions which terminate in general paralysis. The usual termination is complete marasmus, with general or partial dropsy, and irrestrainable diarrhœas.

“ Thus are established two distinct forms of alcoholic degeneration—one, in which the victims have passed through a determinate series of nervous lesions, both of a physical and intellectual order, to general paralysis ; the other, where they remain stationary, and drag on a weary existence, characterized physically by cachexia and marasmus, and morally by the manifestation of the most depraved tendencies and the most profound degradation.

“ We have now to study two other classes—(1), those whose malady has been developed under direct hereditary influence ; and (2), those whose depraved addiction to drink may be attributed to special affections of the organism.”

In the first, or hereditary class, there are also varieties. The children may simply inherit the tendencies of the parent ; but what was habit in the one, becomes an instinct, perhaps uncontrollable, in the other ; and the termination is as already described.

But it is not necessary that the descendants of such parents should commit the same excesses, in order to present the type of progressive degradation. Some are born *completely degenerate*, that is imbeciles or idiots ; others live intellectually up to a certain age, beyond which they stop, and fall into a state resembling dementia.

“ After painfully attaining a certain status—after having laboriously acquired a profession—they find themselves incapable of further progress, and begin to retrograde. They experience *critical phases*, which fix the conditions of their future existence ; for instance, the occurrence of puberty, of incidental maladies of a physical or moral nature, and the like. In these cases, sudden and irremediable transition to idiocy is the fatal termination which awaits them.”—(p. 115.)

Several cases of deep interest are given in illustration of this latter phase, but they are too extended for quotation. They tend to indicate the almost utter impossibility of escape from the hereditary type once stamped upon the race ; and the futility of placing any dependence upon the most solemn and reiterated vows of amendment from those who are once subjected to this

influence. M. Morel appends to these instances a remark, part of which we shall give in his own words :—

“When patients of this class have passed some time in a house of recovery, they return apparently to better sentiments, and make the most solemn promises of amendment. The intervention of authority, and family requirements, then force us to consent to their liberation, of which *all* have ultimately cause to repent.

“*JE N’AI JAMAIS VU GUERIR les malades dont les tendances alcooliques avaient leur point de départ dans les predispositions héréditaires léguées par les parents.*

“Their exit from the establishment was at once followed by a repetition of the same acts. It was necessary to isolate them again ; and each time there was an advance of degradation.”—(p. 118.)

One case is too important not to notice briefly, as it seems to resume in itself all the sad train of phenomena involved in these considerations. The great-grandfather of the young man in question indulged in drink, till it became veritable dyspomania. He was killed in a pot-house quarrel. His son, the grandfather, followed in his footsteps, was brought a maniac to the asylum, and died ultimately of general paralysis. His son, the father, was of comparatively sober habits, but *not the less* did the hereditary taint show itself ; he became insane on the idea of persecutions, &c. His son, the young man in question, was brought to the asylum at the age of eighteen, attacked eight months before without ostensible cause, by mania, the transition to complete idiocy. Thus we see—

“In the 1st generation.—Immorality, depravity, alcoholic excess, brutish disposition.

“In the 2nd.—Hereditary drunkenness, maniacal accessions, and general paralysis.

“In the 3rd.—Sobriety, hypochondriac and lypomaniacal tendencies ; systematic ideas of persecutions, and homicidal impulses.

“In the 4th.—Weak intelligence originally, access of mania ; stupor ; transition to idiocy ; *finally, extinction of the race.*”

It remains to make a few observations upon the tendency to alcoholic drinks, resulting from certain pathological changes. M. Esquirol long ago showed that, whereas the abuse of fermented liquors is often the result of degradation of mind, vices of education, and evil example ; there is sometimes a morbid irresistible impulse which drives certain individuals to such abuse. He has noticed this impulse at the cessation of menstruation, and in the case of an advocate, suffering from a cutaneous affection. M. Morel has also observed a case similar to the latter. Sometimes the tendency is observed to be irresistible at the period of menstruation, and during pregnancy. Out of 200 cases of alcoholism M. Morel attributes 35 to organic disease. General paralysis was

the cause in 10 cases, and organic disease of the heart in 3. In 6 hypochondriacs, and 4 hysterical women, the most marked tendency to alcohol complicated ultimately the original affection. In 16 it appeared due to hereditary tendency to some form of disease *not* alcoholism. In these latter cases the disposition to *steal* was very prominent; they seem to be amongst the most incurable of all mental alienations.

Thus, there are four fatal forms of alcoholism :—

1. Those who have gone through every form of alcoholic poisoning, and terminate their career in general paralysis and dementia.

2. Those who at an earlier period of their vicious career have been secluded in the asylum, and live as above related.

3. The descendants of the two previous classes, including born idiots and imbeciles, and those who live intellectually up to a few years of age, and fall into dementia.

4. Those who are led to alcoholic excess by previous disease or predisposition.

M. Morel concludes his extended notice of alcoholic poisoning, by remarking upon the constant increase, throughout Europe, of this particular cause of degeneration. Its effects in causing degeneration of *race* are traced in another part of the work; the observations, so far, having chiefly applied to individual deterioration.

On Degenerations resulting from various Vegetable and Mineral Poisons.—This subject divides itself naturally into two departments: (1) the effect produced upon the animal economy by certain narcotics, of which the Orientals make use (and after them, others) to produce factitious excitement, in default of spirituous liquors; and (2) the poisonous action resulting from the employment of certain mineral agents in commerce, manufactures, and the arts, as lead and mercury.

M. Morel enters into the history of the use of intoxicant plants as excitants, showing their employment from the earliest times of which we have definite records, and their almost universal use now. He sketches briefly the *kava* of the Polynesians, the *niopo* of the Ottomaques; the betel nut, the *kaad*, the nuts of *kola* and *coca* of the Chinese, Ceylonese, &c., all used for one and the same purpose of intoxication or stupefaction; and then passes on to the three most universally spread narcotics, Hachisch, Opium, and Tobacco.

1. HACHISCH.—The Indian hemp (*Cannabis Indica*) forms the basis of most of the intoxicating preparations used in Egypt, Syria, and most Oriental countries. The leaves are smoked alone or mixed with tobacco. But the most celebrated preparation is

the fatty extract known as hachisch, which seems to be butter charged with the active principle. It is too nauseous to take alone, but is made up into various forms of cakes and electuaries, sometimes mixed with aphrodisiacs, and sometimes with other narcotics, as opium, stramonium, &c. The effects on the system have been so often described, and are so analogous, in many respects, to those of opium,* shortly to be mentioned, that it is not necessary to recapitulate them. They are all referrible to the nervous system. The final results are thus alluded to by M. Moreau :—

“Besides the habitual hallucinations which the extract of Indian hemp produces in some individuals, I think its prolonged usage induces incurable dementia. I have reason to believe that such is the case in many persons met with in the cities of Egypt, who are venerated as holy men (*santons*) by the people, but who are merely fallen into a state of dementia from the use of hachisch.”

2. OPIUM.—“At no period of time has humanity witnessed a fact like that we have now to consider,” says M. Morel. “Three hundred millions of individuals, united under one absolute government, speaking the same language, and having identical religious notions, present to us the sad spectacle of a people menaced, as to its dearest interests, by the most fatal and degrading habit that it is possible to conceive—that of smoking opium.”

An idea may be formed of the frightful increase of the consumption of opium in China by the following figures. China is selected as a typical illustration of the effects of this practice on the race. In 1810, 2500 cases of opium were sent to Canton; in 1820, 4770 cases; in 1830, 18,760 cases; and in 1838, 48,000 cases! And this in spite of the laws enacted against it! laws which the lawgivers are the first to infringe and set at naught.

The effects of smoking it, immediate and remote, are thus described :—

“The first impression is a feeling of content and slight excitement, manifested by loquacity and involuntary laughter. Sometimes there are fits of anger. Soon the eyes become brilliant, and the respiration and circulation are quickened and excited. At this stage of the nervous exaltation the smoker feels a peculiar comfort (*un bien-être tout à fait particulier*), and the temperature is augmented. The impressions are lively, and the imagination wanders into strange illusions. Now we observe a phenomenon frequently remarked in mental alienation. Facts and ideas, long forgotten, present themselves to the mind in all their original freshness. The future appears all bright, and every happiness ever wished for appears realized by the smoker. If he continues smoking, exaltation gives place to depression and utter prostration.

* For the differences of the phenomena produced by these two agents, consult Pereira's “*Materia Medica*,” pp. 1238, *et seq.*

The action of the senses is suspended. He hears nothing; he becomes silent; his face becomes pale, his tongue hangs out; a cold sweat inundates the whole body; and insensibility supervenes, often lasting for several hours. The awakening is what might be expected after such a debauch."

Such are the immediate effects, but neither tobacco nor Indian hemp (nor *perhaps* alcohol) are to compare with opium either in the constitutional results, or in the difficulty of breaking the habit. Except some few smokers, who, thanks to an exceptional organization, can restrain themselves within the bounds of moderation, all the others attain rapidly a fatal termination, having passed in quick succession the stages of idleness, debauch, misery, the ruin of their physical strength, and the utter depravation of their moral and intellectual faculties. Nothing can cure an advanced smoker of opium.—(Huc.) "C'est une atonie dégoûtante, une prostration absolue de toutes les facultés et de toutes les énergies."

"But the action of opium is more pernicious than that of alcohol in another particular—viz., the *rapidity* with which the nervous lesions declare themselves. Given the period at which a person begins to smoke opium, it is easy to predict the time of his death; his days are numbered. The physiological effects are uniform, and succeed each other with an unvarying regularity.

"According to Dr. Ainsley, a considerable fattening first occurs; then failure of strength, and irregularity of walk; then the memory is lost, the intellectual faculties fail, and dementia results. The termination is similar to that of the victims of alcoholism in Europe. . . . *No smoker of opium attains an advanced age*, and their offspring are blanched, miserable, and struck with premature mental decay. For obvious reasons, we have not yet the same opportunity of tracing the ultimate degenerating effect of this practice on the race, as we have of that of alcoholism; but it cannot be doubted that the same law will hold good; and we cannot but be alarmed for the intellectual, physical, and moral future reserved for China, Sumatra, and the other countries where this practice obtains."

M. Morel concludes this notice of opium by a question especially interesting to this country:—

"Is it true, as some authors affirm, that the habit of smoking opium has invaded the capital of England? If it be so, it is impossible to calculate the evil impending. Meanwhile, statistics point to a sad conclusion. In 1830, there were 103,718 pounds of opium received in London, and in 1852, 250,790 pounds!"

3. TOBACCO.—M. Morel expresses himself very guardedly when speaking of the effects of tobacco. He thus introduces the subject:—

"What may be the part which tobacco plays in the production of degeneration? And admitting even that its degenerative action is

an ascertained fact, how far would it be good medical hygiene to attack the usage of tobacco, which has become for all nations not only a habit, but an imperious necessity, to be satisfied at any risk? I have no intention of attacking its use, and this for many motives; first, it is far from being proved that the habit of smoking *in moderation* is in any way injurious; and, secondly, it would not be without danger to invoke the force of an absolute legislation against a habit passed into such an irresistible necessity."

M. Morel seems to think that a large proportion of men *will have* either tobacco or opium, and of the two evils he prefers the former. He considers that there are certain questions still *sub judice*, leaving out of question the moderate use of tobacco—viz., the results of its abuse; the effects upon the system of those engaged in the manufacture of snuff and tobacco; the influence of its special culture upon the internal economy of a country; and the effect of its introduction upon the manners and social customs of a nation.

In answering the question—"Is tobacco injurious to the health?" M. Morel takes simply the fact that nicotine is a virulent poison, and that it is unlikely that such can be introduced into the system in large and repeated quantities without injury. He relates the result of its application to wounds in animals, and its introduction into the stomach, &c., those experiments which are so well known, and which a recent and still continuing controversy has made so familiar to us. He then adds:—

"Were we then to judge *a priori* of the evil consequences to be anticipated from the use of tobacco, we might well be terrified at the prospect. But observing facts and results, we are compelled to conclude that the dose of nicotine absorbed must be too small to produce such serious results except in a small number of cases. . . . We may shortly sum up the evils quoted by authors. The first attempts at smoking produce nausea and vomiting, but the economy soon habituates itself to the practice. It is injurious to adults who have not reached their development; much more to children. The great quantity of saliva secreted, interferes seriously with the functions. Young smokers are generally pale and meagre, and the phenomena of nutrition are imperfect. There is alternate excitement and depression of the nervous system; and it is said that inflammations of the throat and respiratory passages are common. Add to this, that the smoker generally drinks, and passes much of his time in a vitiated atmosphere, and we shall not be astonished at the sad prognostications of many authors."

After alluding to certain cases of clearly defined nervous lesions *following* the immoderate use of tobacco, M. Morel passes on to discuss the effects of the manufacture of this substance on the workpeople; and though he *believes* that these processes cannot be accomplished without producing some deleterious

effects, yet again consulting facts, he feels "bound to suspend his verdict." M. Melier thinks more unfavourably; from his observations he believes that a change takes place in the blood of those thus employed, which amounts to a kind of poisoning. This is in accordance with some views recently propounded in the controversy alluded to.

The subject of tobacco has been lately brought very prominently before the profession and the public, by some observations made by Mr. Solly at St. Thomas's Hospital; and the remarks, excellent in themselves, are much more so as proceeding from so thoughtful and experienced a source. They cannot be too much nor too carefully considered. In relating a case of paralysis, and speaking of its causes, he says:—

"There was another habit also in which my patient indulged, and which I cannot but regard as the curse of the present age—I mean smoking. . . . I know of no *single* vice which does so much harm. It is a snare and a delusion. It soothes the excited nervous system at the time, to render it more irritable and more feeble ultimately. . . . *I believe that cases of general paralysis are more frequent in England than they used to be; and I suspect that smoking tobacco is one of the causes of that increase.*"

On another occasion he writes:—

"I believe if the habit of smoking advances in England as it has done for the last ten years, that the English character will lose that combination of energy and solidity that has hitherto distinguished it, and that England will sink in the scale of nations."

It is unnecessary further to quote from the interesting letters of Mr. Solly on this subject; they are in the hands of every one.* An animated correspondence has arisen, which it is to be hoped will result in some accurate and specific observations on the influence of tobacco in the production of disease. Meanwhile many interesting facts are placed on record. A few of the writers seem inclined to trace almost all social and physical evils to this practice, whilst others consider it as innocuous. It is reprobated because it produces insanity, paralysis, consumption, laryngitis, tonsillitis, short sight, emaciation, dyspepsia, and an infinity of minor disorders. It is upheld because it is pleasant; because it is a valuable therapeutic and hygienic agent, a preservative against cold and starvation, a substitute for food, a solace to the weary, whether of mind or body. One writer attempts to settle its value by an appeal to final causes, asking—"Why was tobacco created, if not to be smoked?" perhaps overlooking the fact that the same trenchant argument applies to every known vice.

* *Vide "Lancet," Feb. 14th, 1857, &c.*

Amid all this gleams of valuable information appear. Dr. Pidduck, writing about smokers, as seen at the Dispensary in St. Giles's, says:—

“Leeches were killed instantly by the blood of the smokers, so suddenly that they dropped off dead immediately they were applied. . . . Fleas and bugs rarely, if ever, attacked the smoking parent.”

And what is very important in reference to the subject now under treatment:—

“If the evil ended with the individual, who, by the indulgence of a pernicious custom, injures his own health, and impairs his faculties of mind and body, he might be left to his enjoyment, his *fool's paradise* unmolested. This, however, is not the case. *In no instance is the sin of the father more strikingly visited upon the children than the sin of tobacco smoking.* The enervation, the hypochondriasis, the hysteria, the insanity, the dwarfish deformities, the consumption, the suffering lives and early deaths of the children of inveterate smokers, bear ample testimony to the feebleness and unsoundness of the constitution transmitted by this pernicious habit.”—*Lancet*, Feb. 14.

The use of tobacco *in moderation*, and under certain circumstances of great hardship and privation, is upheld by many men of high scientific attainments and sound judgment, as not only not injurious, but beneficial both hygienically, therapeutically, and psychically.

Medical men engaged in the investigation and treatment of the diseases of the brain and disorders of the mind, occasionally have brought under their notice cases of severe nervous disorder and mental impairment, clearly traceable to an excessive and immoderate use of tobacco. Shattered nervous system—premature loss of mental vigour—impaired memory—mental alienation, are too often the well-defined result of excessive tobacco smoking. These are facts that cannot be ignored when considering the question at issue.

If society were in a more natural condition, or one more in accordance with the most obvious rules of hygiene, it is highly probable that no poisonous agent, whether narcotic or stimulant, would be habitually desirable or allowable. It would not be easy to define accurately what is “a natural state of society;” but it is easy to say what is *not*. For instance, it is not *natural* for man to pass his life underground, as in the coal mines of this country, and still more in the salt mines abroad; to be exposed, in addition to the ordinary atmospheric vicissitudes, to those of moisture and cold in connexion with sieges, and migrations from a temperate, to either an arctic or a tropical climate; to be immersed perpetually in poisonous or irritating vapours, as in various branches of art or industry; to be suffering the extremes of misery, privation, and hereditary disease. Nor does it appear a *natural*

course of proceeding, that a man should pass his days in the wasting exercise of an arduous and anxious profession ; and perhaps, his nights in noting down the results thereof for the benefit of future generations. These and many other conditions suggest themselves at once as a part of those evil influences noticed in an early part of this paper, with which man has to wage perpetual warfare ; and it does not appear improbable, that *within moderation*, the use of tobacco *may have* as beneficial an effect in enabling him to resist successfully some of these influences, as any other prophylactic agency may have in other cases. It may be injurious to the *normal constitution normally treated*, but may it not resist or avert the abnormal consequences of a different condition ?

So far as to the *use*. The abuse entails certain undeniable consequences. First, dyspepsia and anorexia, with their natural results of cachæmia and partial marasmus. Then ensue those *special nervous lesions*, the nature of which is so clearly indicated by the experiments upon animal life. And finally appear those degenerating effects upon the offspring, which have been before noticed. It must be mentioned in conclusion, and as bearing upon the continuance of the species, that tobacco is supposed to be a powerful anaphrodisiac.

4. *Lead*.—M. Morel gives a case illustrative of lead colic, and partial lead paralysis, and then points out the analogies between this and alcoholic poisoning. There is, in the commencement, trembling, weakness, and paralysis of the lower extremities, and diminution of the general sensibility. Soon there are twitchings and cramps, dizziness, fantastic dreams and hallucinations ; and these are exactly the symptoms of the anæsthetic form of alcoholic poisoning. One symptom, however, is wanting in the lead poisoning,—that of formication.

M. Morel adds, referring to the general train of symptoms :—

“These are the symptoms inseparable from all chronic poisoning ; and more than that, they are the essential signs, which announce by their duration and their constant progress, that the individual is smitten in the most important functions, and is tending to degenerative transformation more and more radical.”

M. Morel notices another distinction between alcoholic and lead poisoning ; that whereas, in the former a toleration of the poison to an enormous amount is acquired, there is none such observable in lead. Another point, mentioned by M. Tanquerel, is very important practically. He says, that those who present the first physical signs of the action of the poison of lead, as the blue line in the gums, and the yellow tinge of skin, appear for a time to be quite well ; all the functions are correctly performed ;

the subject complains of no pain, and follows his employment as usual.

The nervous lesions which ultimately occur, assume all the forms of delirium, coma, epilepsy, &c., sometimes after several attacks of colic, sometimes unpreceded by it. After the occurrence of these, especially the epileptic seizure, M. Morel says the reason is never again sound. We do not enter further into the subject, as it belongs more especially to toxicology proper.

The influence exerted by diseases of the *cerealia*, ergot of rye, maize, &c., upon the degenerations of the race is very important. In introducing this subject, M. Morel, illustrating his position chiefly from the epidemics of ergotism in 1769 to 1772, takes occasion to point out that epidemics are not isolated facts, but are intimately connected with various widely extended cosmical changes. He attributes the disease of the grain to wet seasons, and alludes to the floods and inundations, the earthquakes and electrical phenomena, the fogs, and the immense amount of insect life in those years. The disease of the rye causes ergotism in its various forms; and, as this is not a constant occurrence, but only a casualty, the disease is not endemic, like the pellagra, which is the result of a constant degeneration of the maize. The former may be considered an acute epidemic; the latter is essentially chronic in its nature, and endemic.

The connexion of the convulsive affection called ergotism with the diseased rye, is thus indicated by Taube:—

1. All the persons attacked had eaten rye meal.
2. They experienced immediate amendment on change of diet.
3. They constantly relapsed on returning to that kind of food.
4. The rye of these years contained a very large quantity of *ergot*.
5. This ergot appeared to be more powerful in its effects than in other years.
6. The rye itself was altered, and appeared to possess some of the properties of the ergot.

Four forms of ergotism have been noticed—the mild, the acute, the chronic, and the gangrenous. The mild, or benign ergotism, attacked almost the whole population of the districts visited in Germany. It was characterized by formications in the feet and hands, with a vague condition of anæsthesia and deafness; and gastric irritation, with tendency to diarrhoea and vomiting.

The acute form was similar in many respects to lead colic. There occurred blindness and fainting, trembling of the limbs and cramp, and violent spasm of the flexor muscles. There was great precordial oppression, and intolerable griping; spasm of the glottis and cold sweat. Speech and sense were abolished. About the third day death took place, and no instance of recovery from this form was known. Two remarkable circumstances may be noticed in connexion with this violent convulsive

affection. The pulse remained unaffected ; and the milk in the breasts of women appeared to have no ill effects on the child.

In the chronic form, for some days before the complete formation of the attack, the patient experienced a feeling of weight in the limbs, precordial tension, dislike for food, and cold in the trunk and vertebral column. There were occasional twitchings and cramps, constant retraction of the tendo Achillis, and the formications extended to the internal organs. At this period there were no functional disorders ; the action of the bowels and skin was normal. Then occurred a few hours of suffering, similar in nature to those of the acute form ; after which there was extreme prostration, followed by some peaceful sleep, and an awakening with some sensation of desire for food. The intervals of the attacks presented always the same characters, viz., insensibility of the extremities, formications, trembling of the limbs, derangement of vision, tension in the precordial region. This last symptom announced the recurrence of the acute stage. Sometimes spasm and convulsion alternated with a cataleptic condition, which was generally the transition to epilepsy, succeeded by delirium. A sardonic laugh preceded the intellectual disorders ; the memory was lost, and the most fierce mania succeeded. This was generally fatal in the acute stage ; when it was not so, the patients fell into marasmus and intellectual torpor, from which many never recovered. The few who did recover had an almost interminable convalescence.

Attributable to the same cause, the disease of the rye, is the terrible affection known in France for many centuries as the *mal des ardents*, the *peste noir*, the *feu de St. Antoine*, or more recently, recognising its source, gangrenous ergotism.

“The unfortunate victims of this malady suffered most intolerably. The grinding of the teeth, the contortions of the whole body, the terrible cries, indicated the most inexpressible agony. They complained of a fire under the skin, which consumed the muscles, and separated them from the bones ; yet the surface was cold, and it was difficult to communicate any warmth. Later, the parts affected appeared like charcoal, and the air was poisoned by the smell of the putrid flesh separating from the bones. The arms and legs came off completely from the trunk ; the same affection seized the internal organs, and they perished in extreme agony. In some cases the malady stopped short of gangrene ; but this was a rare exception, and fever succeeded. In some cases there were cramps and convulsions.”

The fatality of this fearful affection varies. In the mildest epidemics, half the attacked died ; in others, the mortality was general. In the epidemic of 1099, none escaped who were once affected ; in 994, 40,000 individuals died of it in the South of France. M. Morel adds—“Il est inutile d'ajouter que l'on ne

connaissait aucun moyen medical contre cette maladie." Dr. Salerne, of Orleans, relates the case of a child ten years of age, whose thighs detached themselves from the articulations without any hemorrhage; his brother, aged fourteen, lost the leg and thigh of one side and the leg of the other. Both died after twenty-eight days! Amputation was of no avail—it seemed rather, in many cases, to hasten the fatal result.

The consideration of these diseases sheds a gleam of light, lurid though it be, upon many of the fearful epidemics of the middle ages, the causes of which have been, and still are, hidden in so much mystery. In tracing the source of the maladies under present consideration to the change in the principal article of food amongst so many millions, and reflecting also that rye is by no means the only grain susceptible of such a morbid transformation as to become poisonous; perceiving also the points of analogy between these affections and many others from time to time devastating large districts, we cannot fail to be struck with the important bearing which this subject has upon general hygiene, and the urgent and paramount claims for its consideration, medically and administratively. This will receive still further illustration from what remains to be said on the subject of *pellagra*, an endemic and chronic disorder, arising from a degeneration in the maize, the staple article of diet of large districts. The following case is intended as an illustration of the results of a diet almost solely consisting of this grain, which, it must be understood, is in these northern latitudes always more or less *imperfectly* developed; hence the chronic and endemic nature of the resulting disease.

An agricultural labourer, F—, aged thirty-five, married, and the father of many children, pursued his occupation, with his family, in the environs of Brescia. Their condition was that common to the Milanese and Venetian peasantry. Their nourishment consisted almost exclusively of vegetable food—chiefly maize, or cakes of rye or millet. Meat and salt fish were very rare events, and only eaten as preparation for the most arduous duties. The country was salubrious; the water pure and abundant; there was no endemic affection but pellagra; but this attacked nearly one-sixth of the entire population. The family of F— had not been spared; his father had died in the last stage of pellagrous marasmus, and his mother was affected with it. Many of his brothers and sisters had suffered from the same affection; he himself had been in the army, and thus removed from the cause; but scarcely three years after his return home he began to experience the precursory symptoms.

Every spring brought much gastric disorder; disgust for food alternated with gnawing hunger, and constipation with diarrhœa;

there was a constant bitter taste in the mouth, nausea, and occasional vomiting. Such were the preliminary troubles. There succeeded, about the spring equinoxes, the cutaneous affection peculiar to this disorder—a kind of desquamative erythema of a very painful character on the back of the feet and hands, the fore-arm, the forehead, and the cheeks.

The nervous system, meanwhile, was much depressed and disturbed; there was extreme lassitude, and singing in the ears, with stupor; and after this violent pains in the spine, and especially in the sacrum. By the summer solstice these disturbances chiefly passed away, and the amendment each winter was great. So passed the first period of the malady.

In the second period, the affection of the skin changed character, and resembled some forms of ichthyosis, preceded by vesicles and bullæ. In some cases horny vegetations appeared on the forehead. The affections of the nervous system were now very grave; they were, frequent stupor, pains in the head and spine, involuntary spasm of the muscles of the back of the neck, obscurity of sight, double vision, amblyopia; trembling, cramps and spasms of the extremities; delirium, hallucinations, shaking of the head, and jactitation. Various forms of excitement and depression alternated for some time previous to his sinking into the condition of mind specifically belonging to pellagra—that of *melancholy, with suicidal tendency*. Had he not been perpetually watched, he would have thrown himself into the water. Meanwhile, uncontrollable diarrhœa induced extreme feebleness—and so terminated what is called the second period.

The third and last period was marked by an aggravation of the previous symptoms. The fever was continual, the stupor profound, the emaciation extreme and progressive. Diarrhœa and general dropsy continued; and finally some convulsions occurred, followed by death. Thus terminated seven years of suffering, with rare intervals of relief.

The principal pathological changes found after death were softness and friability of the mucous membrane; intestinal ulcerations; general softness of the substance of the brain and spinal cord; injection and adhesion of the meninges; and some effusion in the ventricles. The skin in many parts was like leather; the epidermis six times its normal thickness; the nerves appeared more voluminous than natural, and serosity exuded from a transverse section.

We have detailed at length this typical case of pellagra, because in addition to the light that it throws upon the nature of the individual affection, it is not without a most serious significance in relation to the subject of imperfect, insufficient, and exclusive nourishment in general. The analogy between the pro-

duction of disease in this form, and that resulting from diseased potato tuber will readily suggest itself. There remains one further consideration affecting the race, of still more extended importance.

In lead poisoning the individuals affected are too few, comparatively, and the fatal termination too sudden, to permit any very definite calculation as to the effect finally upon the race. In that resulting from the ergot of rye, its occurrence as an acute and occasional epidemic only, has the same negative result.

But in the poison which produces pellagra, the causes are permanent, and "affect compact populations subjected for ages to the same degenerative influence." They act both by direct poisonous influence, and by the ever-increasing hereditary taint.

"The degenerate races have time to produce themselves in accordance with the fixed and invariable laws which preside over the formation of organized beings generally; and pellagra must be classed amongst those maladies which, by being transmitted from generation to generation, perpetuate those special types of cachexia and degradation which can no longer propagate the great human family in the conditions of its normal development."—(Morel, p. 246.)

M. Morel generalizes upon the action of the preceding poisonous agents as follows:—

"The reader, who has followed with attention the developments upon which we have entered, will have been struck with the analogy which the principal poisons present in their ultimate effects upon the nervous system; excepting those whose action is so energetic as to be very speedily fatal. Formications in the extremities, anæsthesia and partial paralysis, and transitory delirium, invariably precede those convulsive conditions which are the *avant couriers* of general paralysis and the complete loss of the intellectual faculties. In a word, the regular progression observable in the organic lesions permits us to define the phases through which individual degeneration must pass before attaining its extreme period. It is clearly demonstrated that there exists a class of beings whose intellectual, moral, and physical degeneration must be attributed to the pernicious influence of poisonous agents."

The influence upon future generations is indicated by a passage quoted from Dr. Buchez:—

"No one is ignorant that many organic dispositions in the human race are transmissible from one generation to another; but it is not generally known how far this principle extends. It is believed in general that form and appearance are transmissible, but it goes much further than this. It is ascertained that *all* morbid dispositions, all *pathological predispositions* are inheritable from parents to children, as well those belonging to the organs of vegetative as of animal life. The predisposition to nervous maladies, to epilepsy, to mania, is transmissible as well as that to gout, rheumatism, scrofula, darts, &c. *Now these predispositions have not constantly existed in all preceding*

generations, but have been acquired by some part of the ancestry, and handed down to the descendants, the morbid taint becoming more and more pronounced in every generation."

M. Morel adds—

"Whatever may be the form of the physical degradation, and whatever the nature of the lesions experienced by the individual, whether arising from alcohol, opium, or other causes, it is *not necessarily* the same typical form, nor the same lesions, which are to be expected in his descendants. The deviation from the normal type of humanity shows itself in succeeding generations by internal and external signs perhaps much more alarming; since they represent enfeebled faculties, an addiction to the worst tendencies, and the limitation of *intellectual life* to a certain period, beyond which the individual is no longer in condition to fulfil the functions of humanity. In contemplating successive generations under these unhappy conditions, we observe a series of proteiform nervous phenomena, having in general a convulsive type; and forming those etiolated, suffering and morbid temperaments, as well as those incredible moral perversities and intellectual aberrations, which by their nature and frequency justly astonish those who have not watched intently the formation of such degenerate races."—p. 324.

M. Morel proceeds to show elaborately how these phenomena are to be studied in reference to their *cause*, rather than to their pathological lesions, which are, in truth, in a great proportion of cases absent. He dwells long upon the *circular* and self-reproducing character of these degenerative affections; but this part of the argument we omit, the subject as yet not appearing sufficiently ripe.

M. Morel attaches this subject of degenerations to the study of mental alienation, as follows:—

"In proportion as I advanced in the career which I had adopted as a speciality, I was not long in perceiving that the curability of mental affections became a problem more and more difficult of solution. The strange complications supervening upon very simple cases of delirium—the frequency of relapses—the circle of successive transformations fatally traversed by those affected with certain forms of mental disease—lastly, the *almost constant want of relation between the gravity of the symptoms and the anatomical lesions*, and the ever-increasing proportion of incurable cases;—all these became to me facts too often repeated not to have their reason in the intimate nature of the evil to be combated. . . . I received communications from my scientific brethren; they were unanimous in recognising the complexity of the causes, and the extreme difficulty of properly meeting them. Never since the origin of medical institutions had such strenuous efforts been made for the interests of the insane. How was it, then, that, in reference to cures, these efforts were so disappointing? . . . Can we admit that the predominance of idiopathic affections of the brain was the cause of such want of success? Certainly these are ever on the increase, but the difficulty is not removed by the acknowledgment;

for *why are they* on the increase? I only saw one mode of accounting for the fact, which was, to consider, in the generality of cases, mental alienation as the final result of a series of moral, physical, and intellectual causes, which, by determining in man successive transformations, connect him with the morbid varieties of the race, which we have called degenerations. In this view, those so affected only represent to the mind those departures from the normal type which are not only incapable of perpetuating the human chain in its integral condition of *capability of progress*, but are the greatest obstacle to this progress by their mere contact with the healthy part of the population."—p. 344.

Mental aberration, serious as it is in any point of view, in this light becomes doubly so, when it is not merely an individual lesion, but the fatal climax, and, as it were, the *resumé* of a long line of individual and hereditary affections. It is easy to conceive how, from one generation to another, the moral and physical condition is gradually deteriorated, when what was the habit merely of one generation became an instinct and impulse in the next; when added to the hereditary taint was the force of example positively, and negatively the absence of all instruction and useful education; when to the disease of mind already existing, either actually or potentially, was systematically denied the exercise of, the commonest rules of hygiene or therapeutics, and the ordinary restraints of morals and religion. In cases representing so deplorable an ancestry as this, medicine will do little in altering the condition of the individual, which may be considered virtually unmodifiable; but there remains a noble part to play in the enunciation of principles which, when carried out, will tend to the removal of those causes to which so many of these evils are attributable. It is true, as already seen, that degeneration tends ultimately to the extinction of the degenerate race; but this is not enough. The death of the branches of a tree is not sufficient to regenerate it, when its roots are fixed in a permanently unhealthy soil. Whether the human race as a whole is in a state of degeneration or not, is not the question—perhaps, were it so, it might be insoluble. But it is clearly proved, or proveable, that a great number of degenerations are in progress in the species, and that these are in certain proportion to well-defined causes. These causes are in some degree removeable; in other respects, owing to the constitution of society, they admit only of more or less modification. Be this as it may, the first step in the process is to point out the source of these evils, and the mode in which they first act upon individuals, and, through them, upon society at large.

M. Morel considers that each of these causes of degeneration results in a fixed specific type or seal (*cachet*), ultimately expres-

sive of its cause, however various the intervening manifestations may be; and that, in a more advanced stage of the science, each will be as recognisable, and as distinctly to be diagnosed from any other, as is now the cretin type (i.e., the degeneration from geological causes) from any other, as that from opium or alcohol. The time for this scientific classification has scarcely arrived as yet.

From these general considerations we pass to a more extended application of the subject. Having traced the effects of poisonous agents on individual organism, and on the descendants of those so affected, it remains to apply the same and other modes of investigation to large masses of people—to have recourse to statistics, to history, and comparison of facts, to ascertain the intellectual, moral, and physical condition of a society in which such evil influences may be rife. We quote M. Morel:—

“When, in a society, a people, a race, we find that the moral and intellectual powers have undergone considerable degradation; that maladies up to a certain time unknown, now have a serious influence on the public health; that the number of insane persons and of criminals increases in great proportion;—we have a right to conclude that a cause producing certain results in individuals and families is likely to do the same in societies. I am about to apply this method of investigation to a country concerning the intellectual, moral, and physical condition of which I am better informed than upon others—I mean Sweden.”

The abuse of alcoholic liquors in Sweden appears to have begun in the last century. In 1785, Dr. Hagstrom, struck with the growing evil, made an energetic appeal to his fellow-citizens to check a vice which was not only an outrage to religion and morals, but which threatened seriously future generations. Since then “thousands of voices have been raised to the same end,” notwithstanding which the evil has increased to such an extent that Dr. Magnus Huss writes:—

“Things are come to such a point, that if some energetic means are not adopted against so fatal a custom, the Swedish nation is menaced with incalculable evil. The danger is not future and contingent; it is a *present* evil, the ravages of which may be studied in the present generation. No measures *can be too strong*; it is better to save at any price, than to have to say, *It is too late*.”

It is unnecessary to enter into the detailed history of the rapid introduction of alcohol into Sweden. An analysis of the statistics bearing upon the point proves the startling fact, that there are one million and a half of persons (half the population) who consume annually 80 to 100 litres (140 to 175 pints) of brandy each person. We need not be astonished at the opinion expressed by Dr. Huss, that Sweden is threatened with irreme-

diable destruction ; nor at the fact stated on the same authority, that the people of Sweden have already *degenerated* in stature and physical strength. But this is not all. New diseases have invaded the country ; chronic gastritis and scrofulous affections have appeared in frightful numbers ; and chlorosis, according to Scandinavian physicians, formerly unknown, attacks now all classes, rich and poor—the dwellers in the country as well as in the town. The hereditary tendency to drink, combined with the constant example, produces a powerful influence ; children of twelve, ten, or eight years evince already the evil predilection.

The duration of life in Sweden seems much affected by alcoholism. The city of Erkestuna is one of the places most addicted to drinking, and the mortality is 3 per cent. annually, whilst that of the entire district is but 2 per cent. ; and in some districts where much less alcohol is consumed, as in Jamtland, the mortality is but 1 in 80.

Mental alienation appears to be considerably on the increase ; and suicide occurs so frequently, that we could wish to suspect the returns of inaccuracy. In ten years, the average of suicides of men between twenty and fifty years was 1 in 57 deaths. This is enormous ; “but,” says Dr. Huss, “if we reckon as suicides those who have died of the immediate effects of alcohol, in a state of intoxication, the proportion will rise to 1 in 30 deaths.”

Crime is frightfully on the increase. In the year 1830, the proportion of criminals convicted of various offences was to the entire population as 1 to 143 ; in 1845, the ratio was 1 to 100.

M. Morel proceeds to signalize the evils resulting from the same practice in his own and other countries. He mentions, in passing, that in the United States from 40,000 to 50,000 persons die annually from the effects of alcoholic liquors. He does not entirely deny that in some cold climates, and under certain conditions of nutrition, alcohol in some proportion may be a necessary article of diet ; but he adds, with M. Quetelet—“Quand un climat crée un besoin, il est bien difficile que l'homme n'en fasse pas un abus.”

He thus sums up the conclusion :—

“We have need of no further proof to show that the abuse of intoxicating liquors produces the same disastrous results in nations as in individuals. The effects are the same in all latitudes ; but they are produced more suddenly and forcibly in proportion as there exist other causes of degeneration, and as the less degree of civilization is unable to develop, as a counterpoise, the salutary influence of morals and education. Under a cause of degeneration so strong, new maladies are developed, and the old ones assume a more serious aspect. The average duration of life diminishes, sterility increases, and the viability of chil-

dren is more uncertain, whilst the intellectual and moral disorders are signalized by the ever-increasing numbers of the insane, of suicides, and of crimes."—p. 392.

The degenerations due to the use of opium and other narcotics are more difficult to trace statistically, although no less indubitable. Our knowledge of facts, past and present, is more limited; but there is another reason still stronger existing in the fact, that such statistics as we do possess, concerning moral offences, cannot be viewed as equally significant with the records of crime in western nations; seeing that many of those acts, which, amongst us, are referrible to crime or mental alienation, are, amongst the Orientals, to be considered as attached to mistaken notions of religion or morals, or as originating from peculiar legislative enactments. To take as an instance, suicide; it is certain that this crime is extremely frequent in China; yet it must not be considered as indicative of the same amount of mental alienation in society which an equal average amongst ourselves would show:—

"It is almost impossible to imagine," says the Abbé Huc, "the readiness with which the Chinese commit suicide. The merest trifle, or a word, induces them to hang or drown themselves, the favourite modes of suicide. In other countries, if a man wishes to revenge himself on his enemy, he kills him; in China, he kills himself. The reasons for this are manifold; first, the Chinese legislation holds *him* responsible for the suicide who has been the cause or occasion of it. In killing himself, therefore, a man throws his enemy into the hands of the executive, who torture him, ruin him and his family, and perhaps take his life; and the family of the suicide ordinarily obtains large damages. On the contrary, by killing his enemy, he exposes himself, his friends, and his family to ruin, and deprives himself of the rites of burial. Again, the suicide, instead of being viewed with horror, is honoured as a brave man; and, lastly, it appears that the Chinese fear many parts of their judicial processes more than death."

In like manner, the great frequency of infanticide attaches itself rather to mistaken views of demon worship (according to the same authority) than to any actual criminal propensity. It is thus evident how differently the statistics of crime must be interpreted in reference to the nations of the East. M. Morel also considers that vast as is the evil of opium smoking in China, it has been in some measure exaggerated; otherwise nothing but the extinction of the race could result. The prevalence of tobacco smoking is also an argument against the universality of the other practice; as it seems ascertained that opium smokers find no pleasure whatever in tobacco. M. Huc says that the use of tobacco has become universal in the empire. Men, women, and children all smoke, and almost without cessation.

Whatever the employment, smoke accompanies it. If they pause in eating, it is to smoke; if they awake at night, it is to light a pipe. Whatever causes combine to produce the result,

"There exists undoubtedly a tendency to decay in the moral, physical, and intellectual condition of this people; and, as the extraordinary abuse of poisonous agents, such as opium, exercises so powerful a deteriorating influence upon individuals and families; on the principles already set forth, it is rational to conclude that the effect on the race will be analogous. Were it otherwise, the degenerative effect of alcoholism, hereditarily considered, might be open to doubt; but this has been by facts much too serious and weighty; and we cannot but recognise the striking analogies between the consequences of alcoholic poisoning, and that from other narcotics." (Morel, p. 400).

M. Morel considers that great as is the evil attendant upon opium smoking in China and the East generally, it would be very much greater if the practice were introduced amongst the western nations.

"It is reasonable to suppose that the predominance of the lymphatic temperament, the inferior development of general sensibility, the greater indolence and apathy of the Orientals, and the absence of those motives for over-excitement of the functions of the brain found in Europeans, produce a notable difference in the action of any given poison on the human economy."—p. 407.

These considerations naturally lead to the study of *mixed causes* of degeneration; or the influence of those already alluded to, when conjoined with, or modified by, climatic influences, and all the elements which constitute the general hygiene of nations,—their relations as conquerors or conquered,—their habits, their occupations, their manners,—and we may add, *their diseases*. M. Morel's introductory observations on this branch of the subject are interesting and important:—

"It is from not having comprehended these ideas, so simple in appearance, that in their relations towards the people of the New World, Europeans have generally failed in their mission of civilization. Thus it has happened, that instead of assimilating the aborigines to themselves by the intellectual and moral element, which tends to regenerate races, and to raise them from their decayed condition, they have imposed customs upon them, incompatible with the *infantile* condition in which they were found; they have developed in them desires dangerous to satisfy, and appetites of the grossest character. . . . It is sad to confess that the anthropological science of the 18th century has contributed to this result by determinately classing these races as a *distinct species*—races whose differences ought to be examined only with reference to those causes which have modified naturally (or morbidly) the one primitive type. . . . The contact of the people of the Old and New Worlds has been attended generally with such unfortunate results, that many authors consider that when two forms of

civilization are in presence, assimilation cannot take place under the ordinary conditions of progress in humanity; and thus they explain the extinction of many American races, and the return of others, once civilized, to a savage life, with instincts more depraved than before. They find further, the proof of this in the presence, in the midst of Europeans, of the melancholy remains of ancient races never completely assimilated to our forms of civilization; or who have only adopted our vices, and become affected with our diseases."—p. 410.

"But if the contact of Europeans has been pernicious to these races, when the sole elements of civilization have been the interests of commerce, and the introduction of vicious habits, it is certain that these in their turn have felt the evil influence of the contact of the Orientals, only borrowing from them their effeminacy and luxury. The influence of climate alone does not sufficiently explain the modifications which the European races have undergone when transplanted to the Indies, to Africa, or to Asia. It is necessary to examine these changes in the new conditions brought about by conquest, by colonization, by immorality, in short by all which I have included under the head of *mixed causes of degeneration*."

The history of the Spanish and Portuguese conquests abound with illustrations of this opinion. The conquered races have well nigh disappeared, whilst the conquerors have greatly degenerated; and their mixture with the aborigines has produced a degraded race, which presents no element of perfectibility in the future. For instance, in Malacca there remain 3000 descendants of the old Portuguese conquerors. Their fathers were the companions of Vasco de Gama and Albuquerque; yet they are in a state of utter degradation, even as compared with the aborigines, amongst whom they dwell. They bear chiefly great names, but they have no idea of their ancestry, or their glorious deeds—even tradition is lost. Their degradation presents itself under its characteristic forms—stunted growth, physical ugliness, default of viability in the infants, obtuse intelligence, perverted instincts, and a succession of progressive morbid transformations, reaching finally the extreme limits of imbecility. Dr. Yvan, from whom these details are chiefly drawn, adds that they are in the most frightful destitution, living almost promiscuously, like wild beasts; they do not till the ground; they live without any social laws; they have no priest, nor any form of legislation. They have no idea of time, and appear incapable of conversation. The men smoke, and the women chew betel-nut, "*tenant suspendus à leurs mamelles affaissées quelques avortons débiles*." M. Morel adds:—

"It is impossible to find a more striking example of degradation of the species. It shows us the terminal phase of some hereditary mental affections in families. The fatal chain of pathological phenomena finishes by inducing in the last descendants a state of imbecility and idiocy incompatible with the normal propagation of the human family."

In inquiring into the causes of this degeneration, we first meet with the crossing of the races, to which the Portuguese have shown less antipathy than either the Dutch, the English, or the French. Climatic agency exerts its powerful influence of enervation; but more than all this, is the fact of the adoption of a system (or rather an absence) of hygiene and morals, simultaneously with the mixture of breed, which belonged neither to themselves nor to the aborigines at first; but has grown out of the despair or apathy of the one, and the luxurious sensuality of the other. As a contrast to the unhappy condition of the race just mentioned, Dr. Yvan draws a charming picture of an isolated company of French colonists, the descendants of the earliest settlers, in the Isle of Bourbon. They have never mixed with any other race; they have preserved a primitive simplicity of manners, and purity of morals; and the result is a physical and intellectual development of a very high order. They appear to be amongst the most beautiful of all people.

M. Morel proposes two further questions for examination—the influence of climate, and that of mixture of races upon the formation of varieties.

Acclimation has been shown to be more easily accomplished, when the efforts of nature are seconded by moral hygiene. But even this is not always successful—the soul is not *all-powerful* in the strife of man with climate. Excessive heat and certain geological arrangements of the soil produce very potent physiological changes. Experience has proved that the first European emigrants who establish themselves in certain tropical regions, *or upon coasts fertilized by alluvial deposits, but insalubrious*, almost all perish; and acclimation only begins to be completely successful about the third or fourth generation. “There are, moreover, some climatic conditions so pernicious, that individuals born in temperate zones have never been able to cultivate, personally, the soil (to turn up the alluvium): and have had to depend for this dangerous labour, always either upon the aborigines, or upon others already acclimatized to other alluvial regions.” This was illustrated in the first attempts to construct a railway over the Isthmus of Panama. *All* the Europeans employed in the work perished, and it was found necessary to employ negroes. With regard to these latter, Buffon observes:—

“We only find negroes (indigenous) in those climates where everything combines to produce excessive heat. This heat is so necessary, *not only to the production, but to the conservation* of the race, that in our islands, where the temperature, though high, is not to compare to that of Senegal, the new born negro infants are so susceptible to the impressions of the air, that they have to be kept for nine days in closed and hot rooms; otherwise lockjaw supervenes, and they die.”

We cannot follow M. Morel in his interesting investigations into the nature of the degenerative influences exercised by the contact of Europeans with the negro race, as exemplified in the inferiority of the negro of our colonies to the negro original. His conclusions are, that the mixture of the races, not being attended by the exercise of moral hygiene, has produced a degenerate (Creole) race; that they have inherited from their parents nothing but their colour and the spirit of servitude; that they are more idle and sensual than those brought from Africa; and finally, that the intellectual and moral decay of those who have come in contact with European civilization, is a singular and painful contrast with the condition of those who have not quitted their native land. In remarking upon the fact, that hitherto the emancipation of the negroes has not been crowned with success as to the well-being of the race, M. Morel says:—

“Pour nous, qui faisons une étude particulière des degenerescences dans l'espèce humaine, nous nous rendons parfaitement compte des insuccès que l'on a signalés. Nos études antérieures nous autorisent déjà à conclure qu'une race dechue et dégradée ne remonte pas *subitement* vers un type supérieur —.”

He, nevertheless, has faith in an extended system of moral training for successive generations, as a means for raising this fallen race to the normal and healthy type of humanity. M. Morel enters elaborately into the examination of the degenerate condition of the indigenous races of North and South America, the Aztecs, the Cherokees, the Hurons, and the other tribes vanished or disappearing before European civilization; also, into that of the Esquimaux, and many others who have been classed by some authors as utterly unsusceptible of civilization, and unamenable to the influence of Christianity. M. Morel will not consider, however, their degeneration (in the sense in which the term is used in this work) as a “fait accompli,” so as to necessitate the renunciation of all attempts to re-elevate them to the normal type of humanity. On the contrary, he considers that there is evidence of success sufficient, in our efforts amongst the Caffres and Bosjesmans, to warrant the contrary opinion.

“The work of regeneration, however, is complex, and it is necessary to establish the theory of the formation of degenerate beings, and to define clearly the distinctive characters of *natural* and *morbid* modifications, in order to be able to apply suitable remedies. . . . There exists no society where there are not *classes morbidly modified*, whose contact with the sound parts of the population is a perpetual source of danger. . . . In the midst of our own cities there are *veritable varieties*, who possess neither the understanding of the duty, nor the sentiment of the morality of actions, and whose minds are not susceptible of being enlightened or even consoled by any religious ideas. Some

of these varieties have been justly designated by the title of THE DANGEROUS CLASSES. Our ignorance of the distinctive characters of these *morbid varieties*, introduces a deplorable confusion in the treatment. Where moral therapeutics ought to be exercised, there is only the repressive force of the law; and on the other hand, we are found directing the whole activity of our medical powers towards the cure of *unmodifiable beings*, as imbeciles, idiots, and confirmed cretins, who, in general, are not the representatives of any simple and isolated pathological condition, but of the entire degenerative elements of their ancestry.”*

As a summary of the deductions from his anthropological inquiries, M. Morel says that—

“We learn that the grand element of renovation for these races is the diffusion of the moral law; and that if their aptitudes have not always been the same for accepting these regenerative influences, and ascending to a superior type, the fault lay often with those who did not take sufficient account of the profound modifications already taken place in the organism; modifications, transmissible hereditarily, and forming the distinctive characters of races and of morbid varieties in the race.”

We are duly warned against disappointment resulting from the frequent failures in our attempts to “moralize the masses,” on the important principle that as *degeneration* is not a sudden work, but often only reaches its extreme development after many generations, so the work of *regeneration* of truly hereditarily decayed races is not sudden; but that long-continued and well-directed efforts will ultimately be rewarded with success. M. Morel looks most hopefully also upon the advantages to be gained regeneratively by a crossing or mixture of races, notwithstanding the evils already signalled as having resulted from such mixture. He enters in some details from comparative physiology, in illustration of the improvement of breed both in plants and animals attained by this process; and considers that man is not entirely removed from the same physiological laws. But he says with Dr. Buchez, that “it is not sufficient that man be engendered carnally in order to be perfect; he must be engendered spiritually also.” As in plants and animals the simple crossing of breed will not succeed without special hygiene in each case; so it must be in man. A specially adapted moral and physical education *must always* form an essential element in any attempts at regeneration by whatsoever process. The evil effects of *consanguineous marriages* are forcibly suggested.

* M. Morel must not be considered as answerable for any apparent lack of sequence in the above observations and quotations. Finding it impossible in our limits to enter with him into his anthropological inquiries, we have selected those ideas which appeared most clearly to illustrate the bearing of his views upon society at large, and those which have a clear practical application, irrespective, in some degree, of the logical course of his argument.

"In the first, perhaps in the second generation, no evil effect may result; but experience shows peremptorily that if continued further than this, even in the rare event of there being no development of hereditary *taint*, there occurs a degradation of the race, a duplication of all infirmities, all the vices, and all the evil dispositions of the mind; heaviness of the faculties, and, sooner or later impotence, with the extinction of the line. . . . These results show themselves not only in families, but in more considerable aggregations of individuals. According to M. Niebuhr, aristocracies reduced to marry in their own circles, are extinguished in like manner. The degenerative tendencies are indicated in these cases under the forms of mania, dementia, and imbecility; and those who have observed the catenation of pathological phenomena are not astonished at the frequency of mental alienation and its hereditary transmission in the noble families of France and England."—p. 526.

Leaving these hereditary considerations, M. Morel now passes on to examine the effects of nourishment either insufficient or exclusive, upon entire races, as he did before in reference to individuals and small communities; and in so doing he contests strongly against the popular opinion that the savage is more hardy and healthy than the civilised man. He quotes Buffon's opinion to the effect that "it is in the action exercised upon the economy by nourishment that we must seek the principal cause of the varieties of form and feature in the human race." He shows that a people living under a civilised government, and leading a regular life, has great advantages over nomadic tribes, or those where every individual must provide for his own support, and alternately suffer hunger, and the effects of an excess of food often bad. If these latter had any advantage over the former it might be looked for in the force or endurance of their bodies. There might also in such tribes be found a much smaller number of defective or deformed persons, and this for an obvious reason. In civilised society the blind and otherwise helpless are cared for by the community; and moreover the character of the mind is of more importance than the formation of the body. But amongst savage tribes, where each individual lives by his own corporeal qualifications, those who are feeble and imperfect perish by the common laws of nature. (Buffon.)

The same author continues thus:—"gross, unhealthy or ill-prepared nutriment causes the human race to degenerate; all the nations that live miserably are ugly and badly formed." "Applying then," says M. Morel, "these principles to our own societies, we find that the air, the earth, and above all, the food, exercise great influence upon the form of men, plants, and animals." Those people who live almost exclusively upon vegetable food, and that in insufficient quantity, are less vigorous, and can support less fatigue than others; and the proportions of the limbs are altered. The Hindoos have the arms longer and much less

muscular than Europeans; and it has been remarked that the handles of their sabres are too small for English hands. (Prichard.)

M. Morel examines the force of an objection made to these views, from the fact of the very scanty nourishment of certain religious orders (as the Chartreux) not being attended by any increase of disease; and also from the nature of the affections which do occur amongst them requiring depletory treatment. It is certain that under no circumstances do they eat any meat; and only during six months in the year are they allowed small proportions of milk, fish, cheese, and eggs. Their principal diet consists of pulse, roots, potherbs, &c., dressed with butter or oil. They have but two meals a day, and only one from September to Easter. M. Morel shows that the regularity of life and manners, and the necessary freedom from many vices, tend to counteract the depressing effects of such a regimen. But more than all this is the careful sifting of the candidates for the order. There is a year of probation; and if, in any particular, the novice is found unable to bear the severity of the discipline and regimen, he is rejected. Thus only those are admitted who are of strong, vigorous constitution, and have demonstrated their power to endure privation.

Closely connected with this subject of *insufficient*, is that of exclusive, nourishment, and particularly that by the potato. M. Morel, though acknowledging the great benefits derived from this tuber, considers that its exclusive employment in many countries has exercised a most baneful influence upon the population. Dr. Huss attributes a considerable proportion of the endemic Scandinavian maladies to this exclusive diet; and congratulates himself that the potato disease has compelled the inhabitants to return to the cultivation of other alimentary plants, which they had too much neglected. M. Morel asks:—

“Can it be true that the augmentation of scrofulous and rachitic affections may be attributed to the over-use of this vegetable? Haller, Kortum, Weber, Neuman, and many others, answer in the affirmative. It is related as a curious fact, that the aborigines of New Zealand had no knowledge of scrofulous affections up to the time of the introduction of the potato; but, after that, they have been cruelly tormented thereby. . . . M. Zokalski states that the cultivation of the potato in the interior of Poland has contributed to repulse the *plica polonica*; but that, on the other hand, scrofula has much augmented.”

This is by no means conclusive, notwithstanding. The New Zealanders, concurrently with this new culture, received from the Europeans smallpox, syphilis, and the abuse of alcoholic liquors—facts which must weigh heavily in any calculations of causation. It is probable also that rachitis was a common

affection in England long before the general cultivation of the potato. It is possible that, in all countries where scrofula prevails, a very exclusive use of the potato may have tended to aggravate its ravages, and to produce general deterioration; but it is going too far to attribute the whole evil to such a source.* M. Morel is also of this opinion, and quotes M. Huss to the same effect.

A singular fact is related concerning a province in Sweden where the potato was almost exclusively cultivated, and where the usual signs of degeneration were remarked. The potato disease having deprived them of this aliment, they were thrown upon bread and leguminous vegetables in very insufficient quantities, and much misery was the result; yet, from the time that the use of the potato ceased, there was a visible improvement in the aspect of *the young children*. Their pale and puffy faces and tumid abdomen became less marked. There was an appearance of some colour in the cheeks, and their former habitual air of stupor gave place to the animation and gaiety which are characteristic of infancy. (Vachtmeister.)

On the propagation of degenerations hereditarily, the author thus explains himself:—

“We do not understand by ‘*hérédité*’ simply the malady of the parents transmitted to the children, but the transmission of *organic dispositions*. The precise malady may not be reproduced in the children; but these are endowed with an unhappy organic predisposition, which becomes the point of departure for pathological transformations, whose catenation and mutual dependance produce *new morbid entities* of a moral or physical order, and sometimes of both. . . .

“Alienists have more frequently than any others occasion to observe this. They know that a simple *neuropathic* condition of the parents may originate in the children an organic disposition which develops itself in mania or melancholia—affections which, in their turn, give rise to others more serious still; until in the last links of the chain the whole series is reproduced in idiocy or imbecility. I have constantly observed that the children of an insane father or mother presented from their earliest infancy nervous anomalies, which were the most certain signs of ulterior degeneration, unless steps were taken to avert the danger. The peril is more imminent still when both parents are liable to such affections. In such cases, the first moral or intellectual manifestations of the offspring are often the indices of the gravity of the inherited curse. I have found no other name for such conditions than *instinctive mania*. . . . A law which I believe to admit of

* M. Schleisner attributes scrofula to a transformation of the syphilitic taint. Given, says he, a tertiary syphilis, it is certain that in the second or third generation, we shall find scrofula appearing. A popular prejudice in Sweden attributes the spread of scrofula to vaccination. But in Iceland vaccination has become very general, and scrofula is almost unknown in that island, except in one small district.

no exception, is that which indicates the profoundly perilous state of the children of those who, on the one hand, have inherited physiologically evil organic tendencies; and, on the other, were born under the sad influence of the immoral and vicious conduct of their parents. This is the law of *double fecundation*, physical and moral.”*

M. Morel proceeds to review generally the indications of cure, and the manner in which we must comprehend the regeneration of the species, amongst the victims of the poisonous agencies above discussed. He views these in two aspects; the first, those who are in the acute stage of the affection, and are generally placed in asylums or other establishments specially adapted for them; the second comprises that class, perhaps more numerous, who, having run through the circle of the morbid transformations already described, either at their own homes or in the hospitals, end their career in marasmus and chronic cachexia; not without having handed down to their descendants the germ of the degeneration by which they themselves are affected.

Much has been done both by science and by the legislature for the relief of both forms of affection: yet it must be confessed that therapeutics have not advanced so rapidly as might have been expected from the numerous and strenuous efforts made. M. Morel attributes this to the backward state of the science of causation. From looking upon these affections too much in the light of isolated pathological phenomena, has arisen the over use and want of success of purgatives and the antiphlogistic method generally.

Since a better and more extended comprehension of the cause and *representative* nature of these affections has arisen, the delirium, the agitation, and the fury, which used to be treated by repeated bleedings, are better understood; and are met by tonics, and such regenerative physical and moral means as can be applied to those who are not in the last period of the degenerate condition, that of dementia or general paralysis.

Pellagra itself, a degeneration from diseased food, used to be treated by copious bleeding; but a recognition of the cause led to the adoption of methods of a more strictly hygienic and pro-

* Alcoholic intoxication and its results afford a noteworthy example of this double fecundation in respect both of the moral and physical nature. The reason is plain, when we consider that the fact of drunkenness in the parents is indissolubly allied to numerous degenerative conditions, which create misery, immorality, and, so far as regards the children, the absence of all proper moral or physical hygiene or religious culture. “I have constantly found,” says M. Morel, “the descendants of the sad victims of alcoholic intoxication in their chosen habitats, the asylums for the insane and the houses of detention. I have constantly observed in them deviations from the normal type of humanity, revealing themselves, not only by arrests of development and anomalies of constitution, but by those vicious dispositions which seem to inhere in these unfortunate creatures. I am convinced, from these observations, that the victims of this double fecundation rarely, if ever, escape the above-stated consequences.”

phylactic nature, involved in separation from the diseased grain. A sad experience, however, showed that those who were cured, relapsed very shortly after returning to their pristine diet; and the relapse was always worse than the original disease. A new era arose, therefore, in treatment,—“to prevent those maladies which it is often impossible to cure, seeing that their causes, operating sometimes permanently and sometimes periodically, constitute in either case a source of immense danger for the future of the human race.”

“It was a spectacle worthy of admiration—that of the zeal, devotion, and self-negation, which physicians evinced in the search for and application of preventive means. Whilst the immense impulse given to all branches of industry and commerce struck like a vertigo upon the inhabitants; whilst the thirst for gain, on the one hand, and the imperious necessity to live, on the other, precipitated every one—masters and workmen, into that exaggerated course, where so many left their health and reason; the physicians watched over the dangers of the situation, pointed them out in their works, and sought for all the means of combatting the dangers which they foresaw. . . . It would be impossible to enumerate all that has been done in this way. The natural sciences, chemistry, physics, physiology, all lent equally their aid to the elucidation of the question of the deleterious nature of certain occupations and habits. . . . These researches, we may add for the honour of medicine, have given such an impulse to the science of hygiene, that its influence is ever felt more and more in many social arrangements, and has been sufficiently powerful to modify certain legislative enactments in European countries; and to induce new ones eminently favourable for combatting the action of degenerative causes.”

The most powerfully active sources of degeneration are, as we have seen, chronic alcoholism, the insufficiency of nourishment of a proper kind, and the alteration of those cereals most necessary to man. When the growing evils of alcoholism were first noticed in Sweden, naturally the first suggestions involved the limitation of its production by government, and the formation of temperance societies. But M. Huss suggested that great as was the evil, it was not the sole one. The insufficiency and diseased condition of the cereals, the almost exclusive nourishment by potatoes, and the almost entire absence of animal food, ought to weigh heavily in any measures adopted for preventing the degeneration of the species. He proposed a regenerative method, involving the return to a proper cultivation of the grains displaced by potatoes; to introduce into the general dietary a larger proportion of meat; and to encourage the cultivation of the hop, a plant eminently tonic and reparative. These methods, though opposed actively by the ignorance and poverty of the people, and passively by the supineness of the government, promise ultimately to be crowned with success.

In reference to pellagra, an eminently degenerative endemic and hereditary affection, it has been proposed* to call upon government to prevent the marriages of those affected; but it appears scarcely probable that any measure of this nature could be endured in free countries. In default of this, the resources of chemistry have been energetically called upon to devise means for making of the maize (the source of this disease) a bread which will be at once nutritious and innocuous; and this appears from a paper in the *Agricultural Journal* for 1853 to have been at last accomplished. Nevertheless, when science has done her work, the prejudices of the people have to be conquered.

"As to the potato, it is now demonstrated," says M. Morel, "that the disease is nothing more than the result of a degeneration due to carelessness and neglect of scientific principles on the part of the cultivator. *The potato has not been renewed from seed.* Its perpetual cultivation in the same soil has caused ultimately a deficiency in the materials necessary for its nourishment, and the exaggerated employment of soot as manure has produced monstrous varieties, which have quickly degenerated." The remedies are obvious. M. Morel adds:—

"The necessity for better nutrition is still more imperiously indicated, inasmuch as the predominance of nervous affections has created in all classes of society, without exception, physiological and pathological conditions, which deserve in the highest degree the attention of hygienists, and the solicitude of governments. A practice of eight years in a large asylum, containing 1000 inmates, and responding to the exigencies of more than 2,000,000 of individuals, has shown me that affections which I consider eminently degenerative, are spreading ever more and more extensively in the inhabitants of the country. The peasant constitution is more feeble, and habits of intoxication are spreading into districts hitherto preserved from them. Great numbers of young people inaugurate their entry into adult life by the excesses of their parents. Syphilis and scrofula are on the increase; and neuroses, which formerly appeared to be only the birth-right of the higher classes, as hysteria, hypochondria and chlorosis, attack now the inhabitants of the country. There results a manifest increase in the number of suicides and of cases of mental alienation, without counting a general impoverishment of the organisms, showing itself by debility, cachexia, and all the attributes of a nervous and degenerate temperament. I am not a pessimist, and far from exaggerating the situation, I only superficially point out the danger."—p. 605.

"Some considerations upon the maladies produced by marshy effluvia, and by the geological constitution of the soil, will complete what I have to say upon the theory which represents poisonous

* Strambio.

agencies as amongst the most active causes of degeneration in the human race."

M. Morel proposes to demonstrate ; (1), the strong analogies between the conditions of those living in marshy and those in cretinous districts ; and (2), that the extreme state of cachexia known as cretinism has no other origin than that which determines the cachexia of marshes. He considers that it is not by treating individual cases, but by attacking the disease (cretinism) in its causes and origin, that the evil can be extinguished.

As an example of the degeneration of organisms in marshy districts, he quotes the graphic account given by Montfalcon of the inhabitants of "la Bresse," the same being applicable with slight modifications to the dwellers in all marshy districts.

The Bressans, disinherited by nature, only feel the burden of life ; the mournful influence of their climate is impressed upon their features ; it modifies to an extraordinary extent their functions and faculties. They are born sickly, and they cease to live at what should be the age of vigour. All the elements conspire to the ruin of the Bressan. The air he breathes, the water he drinks are both poisoned ; his miserable dwelling is scarce a defence from a pernicious atmosphere ; his food is coarse and insufficient ; and the kind of labour which he pursues (amid humid forests and morasses) does not permit him to anticipate a brighter future. His stature is short, his bones rickety, his skin sallow, thin, and unhealthy, his muscles flabby and undeveloped, his features tumid, his belly swelled and dropsical. Scarcely has he quitted the breast when he begins to languish and emaciate ; a large proportion die before the age of seven ; those who survive do not *live*, they *vegetate*. They are ever subject to dropsies, putrid and malignant fever, passive hæmorrhages, chronic ulcers, and a host of other diseases, which would render life intolerable, were it not for the corresponding apathy of mind. "Melancholy, apathy, a sort of idiocy, is the habitual expression of a countenance rarely modified by passions." Old age commences at forty-five—they are decrepid at fifty-five—few reach sixty. "*We do not live*," said one of these wretched creatures on one occasion,—"*we do not live, we die*."

Thus the *marsh degeneration* develops itself physically in stunting of the individual, engorgement of the viscera (especially the spleen), languor of all the functions, aggravation of ordinary maladies, complex lesions only explicable from the atony of the nervous system, and finally the short duration of life. Intellectually it manifests itself by torpor of the understanding, apathy, a sort of stupor almost idiotic, and in all cases an indifference of the most profound character.

The children born of such parents are necessarily degenerate ;

and being exposed to a continuance of the same original cause, are ever progressively deteriorating. The population diminishes, and must finally become extinct, unless supported by immigration. Animals and plants undergo a like decay.

The *marsh*, producing the poisonous miasm, requires for its formation the following conditions:—an argillaceous soil, preventing the filtration of the water; a basin where the waters accumulate, and where organic matter may decompose; and a temperature high enough to determine the evaporation of water charged with a miasmatic principle, more or less deleterious, according to the nature of the putrid matter contributing to its composition.

M. Morel transfers the study of the effects of this poisonous miasm from its natural habitats to the midst of large cities, and finds “the same pathological phenomena evinced not only in the acute forms of typhus and typhoid affections, but in the *etiolation* of the race, and a degradation which yields in nothing to that noticed in marshy districts, and those infected with cretinism.”

In illustrating this position, London, and many of our large towns, occupy a prominent and most unenviable notoriety. He quotes M. Leon Faucher in his terrible account of Whitechapel, Mr. Toynbee upon Westminster, Dr. Southwood Smith, and many other of our own writers. The following is one passage out of many similar:—

“The chamber of a person attacked with fever in an apartment in London, where the fresh air does not circulate, is in a condition perfectly similar to an Ethiopian marsh, where heaps of locusts are rotting. The poison is the same, and only differs in intensity. Nature, with her broiling sun, languishing air, and putrid morasses, manufactures pestilence on a large scale;—poverty, clad in rags, and steeped in filth, excluding the air and increasing the heat, succeeds but too well in imitating nature.”

Liverpool, Manchester, Wolverhampton, and many other towns are passed in review, with statistical details of a frightful nature—all those revelations with which official inquiries of late years have made us so familiar. It is time, indeed, that these revelations should be followed by energetic measures for radical reform, when the very hearts and foci of our wealth and enlightenment are known to our continental brethren chiefly as the hotbeds of fever, pestilence, and general degradation.

But the malaria of large cities producing these fearful results does not *act alone*. The absence, insufficiency, or impurity of nourishment—the abuse of alcoholic liquors, and sensual pleasures—the absence of all intellectual and moral culture, play a fearful part in the degenerative progress. After dwelling upon

the insalubrious nature of some employments, and their relations particularly to the young, chiefly of our country, M. Morel proceeds to sketch the intellectual and moral condition of the working masses, having defined the deterioration in physical constitution as analogous to that already described as existing in marshy districts. Referring chiefly to Wolverhampton, he says :—

“The education of children is literally nothing; the child of five nurses the child of two years, and the child of seven watches over both, and keeps the house in the absence of its parents. To facilitate this, the mothers administer to the nurslings preparations of opium. . . . Another pathological phenomenon manifests itself which we believe to be inevitable in the morbid degenerations of the species—that is, the *arrest of development* of the intellectual faculties. Their intellectual existence is limited to a certain age, beyond which not only the evolution of the faculties remains stationary, but the children who have been able to learn forget irremediably the few ideas they have acquired. . . . We have had occasion to observe the same in all localities where cretinism is endemic. Children who *appeared* intelligent experienced this intellectual *arrest*, which almost always corresponded to one of a physical nature. These children become the victims of undeserved punishment: they *cannot learn*—they are not culpable—they are only undergoing the inevitable consequences of congenital degeneration.

“The moral condition of the people is no less sad. But one remarkable fact is developed by the inquiry,* that, notwithstanding the general corruption of manners consequent upon drunkenness and unnatural accumulations of people in confined lodgings, there are but few instances of seduction, and few natural children. *La pauvreté du sang, la maigre chère, et l'épuisement qui suit le travail, ne laissent aux jeunes filles ni temps ni force, ni désir pour le mal.* And thus the unfortunate creatures are protected against the consequences of vice by the very excess of their sufferings! But the corruption of the soul is there, though the prostitution of the body be checked by such causes.”

M. Morel considers the phenomena of degeneration, as existing in cretinous districts, as eminently allied to these, and as arising from similar causes, most especially from a quasi-marshy geological structure. He states that it is, in Savoy, almost exclusively on argillaceous soils, and those of chalky clay, that goitrous and cretinous affections appear. Wherever we meet with hills formed of *clay schist*, or declivities of a black glutinous earth in which the rain torrents dig deep trenches, or enormous deposits of gypsum, there we may be certain of finding people profoundly affected with goitre and cretinism.

Monseigneur Billiet, Archbishop of Chambéry, views the

* By Mr. Horne.

causes as primary and secondary. "I regard," says he, "as *secondary causes*, hygienic conditions, the external configuration of the soil, the narrowness of the valleys, excessive humidity, and the bad construction and dirt of the habitations. . . . But the *primary cause* must be sought, not in the exterior configuration of the country, but in its mineralogical structure. These affections are endemic, because the population has fixed its abode in the country which produces them. The localities which now possess them have always had, will always have, them. Take this population into a healthy locality, and after one or two generations they will be free from these infirmities. That which replaces it will in due time become affected in the same manner, because the true cause of the evil is neither in hygienic conditions nor in the blood of the people; *it is under the surface of the soil—not above it*. The soil exerts its influence upon the people by its effects upon the water, and, perhaps, the produce of the earth. What is the mineral which produces these effects? Is it magnesia, as M. Grange suggests; or the absence of iodine, as according to M. Chatin?"

M. Morel agrees generally with these views, but is of opinion that "cretinism may be extirpated from a country without resorting to the desperate expedient of quitting it," and appeals for confirmation to the beneficial results to be obtained in analogous degenerations in marshy districts. Considering primarily the cause of cretinism and allied affections to be a poisonous influence exerted by miasm upon the cerebro-spinal system, he still allows due weight to the over-abundance of magnesia and the absence of iodine; and adopts a system of therapeutics applicable to all theories.

"We seek to separate those who are threatened or attacked from the infected locality. We place them in elevated districts where they breathe a purer air. We modify the nature of the water by adding iodine in some form. We seek to fortify the enfeebled constitution; we administer tonics, and strengthening baths; we act upon the nervous system by means of electricity; we employ gymnastics; we seek by every means to awaken the senses. We have the greatest confidence in the influence of the moral upon the physical nature. We make energetic appeals to what remains of emotion and intelligence, to arrest the march of the evil, and to prevent complete degeneration. This is not an empty theory, but one the effects of which have been proved in successful practice. But we attack also the evil in its *origin and source*; we render the localities wholesome by embanking rivers, and converting stagnant pools into running water. By these and such measures, cretinism has been extirpated at Robestsau near Strasbourg, and other localities. The complete disappearance of the evil depends on *collective effort* in drying and draining morasses; in isolating those persons who are likely to propagate it hereditarily; and

in giving proper moral and intellectual culture in the schools or districts where the evil exists."

These curative elements are of more extended importance, inasmuch as the cretinous development is always found, more or less closely socially allied to other affections of an eminently degenerative nature. Goitre, deaf-dumbness, rachitis, imbecility and idiocy, scrofulous and tuberculous affections, hernia, chronic gastritis; all these exist concurrently with cretinism, are due to like causes, and are necessarily amenable to the same hygienic, prophylactic and therapeutic agencies.

In the atlas of plates accompanying M. Morel's valuable work, there are illustrations of the typical forms of degeneration arising from the various sources already mentioned; as those from alcoholism, from the geological structure of the soil, from malnutrition, from cretinism, &c. There is one series so illustrative of the author's views of *progressive* degeneration, and so instructive in all respects, as to demand some detailed notice. It represents the father and mother of a family, with their six children, born during a space of twelve years, during which the progress of degradation is traceable in the most interesting and conclusive manner. The district is that of la Meurthe.

Marie, the mother, aged 54, has had eleven children, only six survive. She became goitrous at 30 years of age. She has not the cretinous type, *but is emaciated and aged from privation and misery*. Her intelligence is normal, and there have been no cretins in her family.

Joseph, the father, is goitrous from birth; he is the sole survivor of his father's family; his father and grandfather were semi-cretins, as he is. His head is flattened posteriorly, and *very wide in the bilateral diameter*. His intellect is feeble.

Annette, aged twenty-six, is slow in locomotion, and rather torpid in intelligence—slightly goitrous. Otherwise she is normal, physically and morally. She has two young children, in whom, *as yet*, no sign of degeneration is apparent, except precocious *etiolation* due to misery and want.

Rosine, aged twenty-four, bears further physiognomical marks of deterioration, in the nearer approach to the cretinous feature. Her intelligence is obtuse, and her moral sense very defective. She has a natural child, *as yet* healthy.

Ireneus, aged twenty-two, presents a still further advance in intellectual and physical decay. He has a *puffy* figure, badly-formed head, and is below medium stature. His genital organs are enormous, but unfit for reproduction. He has the cretin temperament, without the precise typical form. He cannot be taught to read or write, nor to perform any useful work—he is also deaf.

Pauline, aged seventeen, is congenitally deaf and dumb. She

is goitrous, and utterly undeveloped morally and intellectually. Her actions are automatic, and her character *sad*, but irritable. There is a general arrest of development physically.

Françoise, aged sixteen, and Agnes, aged fifteen, are perfect cretins; the arrest of development is irremediable; there is no sign of puberty, and they will remain during life what they now are, completely degenerate beings. They cannot speak, and scarce can walk. Their skin is yellow, and the flesh œdematous. Dentition was very irregular, and some of the first teeth still remain.

The children born after this period all died; reproduction had reached its term.

In conclusion M. Morel briefly reviews the ground already passed over, and sketches the plan which he proposes to himself for the forthcoming work (intended as a continuation to the present one) on hygiene and therapeutics. Viewing mental alienation as the last term of a series of degenerations, he continues:—

“If the idea which I have formed of the moral, intellectual, and physical causes of this degeneration be correct, the plan which I must follow in my curative indications arises naturally from these preliminary investigations. Moral and physical hygiene; the treatment of the acute stage; prophylaxis; these are the three terms which best represent the fundamental therapeutic questions to be elucidated.”

1. The moral treatment, which is but the application of the great duties imposed by the divine moral law, fixed and immutable, is not, as M. Morel states, a new thing; but what is new is the precise enunciation of the special data which must preside over this class of treatment, “in regard to temperament, age, hereditary predisposition, and all the morbid organic conditions, intellectual and physical, which constitute states of suffering—in other words, *degenerations*.”

“The moral law certainly is *one* and universal; and the possibility of its being accepted and practised by all, is one of the strongest presumptions in favour of the unity of the species.

“But races have not all arrived at the same degree of civilization; and in the midst of civilized nations themselves, there exist *degenerate races*, who have scarce a perception of the progress of the superior classes, and who cannot attain to its benefits, if left to their own unaided resources. These are the victims of the ‘*mixed causes*’; and the application of the moral treatment to these disinherited masses, is at once one of the noblest and most difficult studies which can engage the true friends of humanity. I shall tell nothing new to physicians in saying that physical is inseparable from moral hygiene; but *there are moralists who have need to be convinced that the moral law can only become fruitful in a sound organism*.”

2. All the causes of degeneration, already reviewed, produce

profound effects, first upon individuals, and through them upon races or communities. M. Morel considers that there is no form of degeneration whatever (mental alienation included), which has not its *acute* stage or period, during which the resources of medicine may be expected to be attended with success, *if applied in time*. This is the ground where medical science appears to most advantage; but "the duty of the physician does not cease with the transitory cares bestowed upon acute or accidental diseases."

3. There is another sphere where his science and devotion are shown, perhaps less brilliantly, but in a manner more conducive to the general and ultimate good of humanity. This is in prophylaxis—in other words, the science which proposes for its end and aim to combat the causes of disease and prevent their effects.

Prophylaxis is of two kinds, *defensive* and *preservative*. The removal of criminals and persons of unsound mind from general society into prisons and asylums is of the former kind; inasmuch as society is thereby, and *for the time*, defended from their evil influence. But the period of this form of prophylaxis is limited in the one case by the term of punishment, and in the other, by the date of apparent cure. "Both enter society again, and it is to these that the application of the moral law must be made in its most extended sense. Society must adopt then a preservative prophylaxis by attempting to modify the moral, physical, and intellectual conditions of those who have been separated from them: before restoring them to their former social position, they must be armed against themselves, in order to lessen the number of relapses."

We cannot more aptly conclude our analysis of Morel's able and philosophical work than in his own words:—

"The plan which I have adopted is vast; but I am determined to pursue it to the end. The confidence which sustains me does not arise from any exaggerated idea of my own strength, but from a lively and profound faith which strengthens and animates me. I believe that the study of the causes of degeneration, and of their treatment, is one of the most important, useful, and suggestive that can occupy the mind of a physician; and that it is the duty of each, according to his power and ability, to aid in preventing the generalization of the evils pointed out; and thus to have ever before him, as the programme of his labours, the *intellectual, moral, and physical amelioration of man*, or (if the term be preferred) HIS REGENERATION."

ART. II.—NOTES ON BELGIAN LUNATIC ASYLUMS,
INCLUDING THE INSANE COLONY OF GHEEL.

By JOHN WEBSTER, M.D., F.R.S., &c.

(Continued from page 78.)

GHEEL.

AMONGST the most remarkable localities of Europe, in reference to its inhabitants, none seems so singular, stands more prominently forward in various phases, or deserves inspection by philanthropists and curious travellers, like the establishment for lunatics, which forms the subject of subsequent observations. Situated in the north-eastern portion of Belgium, towards the confines of Limburg, and formerly occupied by the Texandrians, mentioned in Cæsar's *Commentaries*, but subsequently called the Siberia of the Low Countries, Gheel long remained almost unknown to foreigners. Until very lately, no roads existed through this outlandish district; consequently, it was rarely approached, even by the natives of neighbouring provinces. Nay, in 1821—when Esquirol paid it a visit, with my friend M. Voisin—the journey then proved a most difficult undertaking. Indeed, so recently as the Revolution of 1830, only one crazy lumbering vehicle, of the rudest description, carried travellers twice a week from Lierre—a cantonal town of 13,000 inhabitants—which is situated at the confluence of the great and little Nethe rivers, about eighteen miles towards Malines. This distance, however short, often required from nine to ten hours travelling; the carriage being frequently up to its axle in mud or gravel, according as weary wayfarers then experienced wet or dry weather.

At present matters are entirely changed; and those who undertake the same journey, which only twenty years ago was surrounded with many difficulties, need not now hesitate, notwithstanding former discouraging statements. These accounts belong to history, of which a parallel no longer remains; as the following outline of my recent journey to Gheel amply demonstrates. Leaving Brussels early by railway, I stopped at Contich, the second station south of Antwerp. From thence a train immediately started for Hérenthals, on the Turnhout line, where it arrived about an hour afterwards. There, a two-horse omnibus was waiting, to carry passengers to Gheel, eight miles further, in which town I arrived in about one hour and a half, without encountering mishaps, or experiencing the slightest fatigue; having thus travelled the whole distance in little more than four hours, but altogether very differently from that described by former tourists visiting Campine.

For the information of those who may hereafter propose to sojourn at Gheel, I would briefly mention that two good hotels are open to receive strangers. Both may be entered with confidence; but the one I selected was "De Schild Van Turnhout," kept by M. Fr. Wouters. Certainly, it has seldom been my good fortune, while travelling, to obtain better lodgings, and experience more satisfactory treatment, in all respects, than at this hostelry. The bed was excellent, linen white as driven snow, with unexceptionable food, and all cooked admirably. Doubtless, the sanded rooms lacked carpets, and the attendants were not stiff neckclothed waiters, like those often seen at English hotels, while serving in silver dishes burnt mutton-chops or tough beef-steaks; which frequently cause fits of indigestion, not alleviated by an expensive bill afterwards presented. There, on the contrary, a smiling servant-girl attended at table who, although unable to speak either French or German, and only her own native Flemish tongue, yet understood whatever the guests required. To these details I would also add, that the cost was extremely moderate. Thus for breakfast, consisting of better *café au lait* than one often gets in England, with unexceptionable bread-and-butter *ad libitum*, the charge was sixty-five centimes; or only six pence halfpenny sterling! For dinner, composed of soup, three kinds of excellently cooked viands, vegetables, followed by cheese and dessert, I paid one franc and a half; while another franc per night was added for the sleeping apartment. In short, nothing could be more satisfactory in every respect. Therefore, should future Gheelois pilgrims propose making a journey thither, they need not apprehend suffering perils or privations; but quite the reverse. My sojourn and treatment at the "Turnhout Arms" hence proved extremely agreeable; and when returning to Hérentals, the inside of our conveyance was filled with twelve young ladies, going home from a school of repute near Gheel, to pass their autumnal holidays at Antwerp and Brussels. These facts are now mentioned to indicate, that this district, formerly considered almost beyond the pale of civilization, and but little known even by residents of adjacent provinces, has now joined in the onward march of improvement.

THE INSANE COLONY.

According to tradition, the town previously named, and capital of Campine, has for ages been celebrated as a refuge for lunatics; in which, since long bygone times, it was popularly believed, a residence would prove greatly conducive towards an insane patient's recovery. The legend respecting the origin of this reputation is thus reported:—Late in the sixth century,

Dympna, a daughter of an Irish king, became converted to Christianity, by an anchorite named Gerebert. The father felt much enraged at this conversion, and being also amorous, it is said, of his own child, threatened vengeance; upon which the young lady, with her male companion, fled across the sea, and arrived safely at Gheel; where, she resolved to dedicate herself to devotion and celibacy, along with St. Gerebert. However, the old pagan sovereign having discovered their retreat, insisted upon Dympna again changing her religion; but she would in no way consent. This refusal made the savage monarch so furious, that he drew his sword and cut off her head mercilessly at one blow; having done the same previously to Gerebert. These cruel acts greatly frightened several lunatics, said to be then present; and tradition reports cured them immediately, through the strong impression this horrible spectacle produced on their excited feelings. Immediately, the cry of "A miracle! a miracle!" was raised by the wondering bystanders; and thus Dympna—saint and virgin—became ever after the patron of all mad persons. This faith having spread abroad, lunatics were brought to Gheel to get cured through St. Dympna's intercession, and firmly established its reputation. About A.D. 1200, a church was erected on the spot, where the murder above described had been committed, in which the saint's bones and relics were subsequently deposited.

The principal altar of this ancient sacred edifice—which deserves inspection—represents an allegorical figure, larger than life, of St. Dympna—not headless—seen elevated on a cloud imploring the Divine mercy upon several lunatics standing in her vicinity. At each side, groups of insane persons—all large statues—may be likewise observed, whose feet and hands are bound by golden chains, identical in form with those still used to restrain violent maniacs. In a central chapel of the "diambulatorium," an elaborate carving in oak—much admired by sculptors—represents the tragical history of this church's patron saint. In the first compartment of that curious work—made by an unknown artist—the birth of Dympna is portrayed. The second typifies the Queen her mother's death. In the third, the devil appears tempting the Irish sovereign. The fourth shows Dympna embarking on board of ship with St. Gerebert, in order to cross the ocean. The fifth exhibits the King in pursuit. In the sixth, he is seen cutting off his daughter's head, close to the decapitated corpse of her pious instructor. In the seventh, several priests—wearing rich habiliments—are carrying the saint's relics in a grand procession. Finally, in the eighth compartment, the devil is observed issuing from the head of a female lunatic, while prayers are being said by some priests; and near whom another chained

maniac seems anxiously waiting his turn of deliverance from the demon by whom he is supposed to be possessed.

But the most remarkable object, perhaps, in this church, is a highly ornamented tomb, said to contain the saint's bones. This tabernacle stands on four stone pillars behind the great altar, so as thus to form a passage about three feet in height, and through which lunatics, brought here for cure, were accustomed to pass on their knees. Poets say the palace stairs of great personages are often worn by beggars asking favours. Here, the poetical sarcasm is really verified; since, the stone floor of this formerly much-revered locality appears worn away, to some extent, by the pressing limbs of devotees; analogous, in fact, to the marked result I observed on the bronze figure of St. Peter, at Rome, whose toe—not the original appendage, as a joining near its ball shows the present has been added—was actually much decreased in size by continuous osculades from faithful “*pellegrini*,” frequenting the Eternal City's magnificent cathedral. This phenomenon I personally noticed, when examining the above celebrated statue, which is believed to have been cast from the metal forming, or as some authorities confidently assert, once was the real “*Jupiter tonans*” of antiquity.

At Gheel, these idolatrous genuflexions, under St. Dymphna's tomb are now of much rarer occurrence than in more ancient times, so that cures through such means have become, of late, very unfrequent: or, to quote the words of a late writer, “ever since faith has been extinguished and religion almost exiled from the earth.” Nevertheless, examples still sometimes occur, where persons devoutly crawl on bended knees through this once-hallowed spot; as well to get cured, as to prevent their subsequently being attacked by mental aberration. Indeed, this ceremony actually took place not long previous to my visit; the party and assistants, all the while, then singing or praying, in order thus to obtain the saint's intercession in the lunatic's favour; whereby they believed, the ultimate result would prove more efficient and satisfactory.

Near the central part of this temple, on the left of the choir, St. Dymphna's statue, clothed in silken garments, and profusely ornamented with gold lace, fills a large glass case, before which wax tapers and a “*prie-Dieu*” are placed, ready for any person to use, who might desire to address the image in question. This figure once possessed great repute; and although less now than formerly, it was reported to me that demented persons still frequently visit the locality mentioned, but always accompanied on such occasions by some attendant; since an express regulation forbids any lunatic frequenting the churches at Gheel, without a sane companion.

In addition to the peculiar features above described, charac-

terizing this far-famed sacred edifice, the most singular place of all is, indubitably, a darkish dungeon-looking apartment, in a small house attached to the principal church tower, now occupied by two female officials. Within this hole—apparently a kitchen—maniacs brought for cure were lodged by their relatives, for the space of *nine* days consecutively. During the whole of that period, the insane victim remained chained close to the fireplace, by iron rings fixed on one wrist, having another on the ankle; both being still seen as originally arranged. At night, the lunatic was put into a wooden bed adjoining the chimney, to which strong iron chains bound its occupant by the feet, as also both arms, having straw under, and some covering thrown over the wretched sufferer. I carefully examined the fetters of this real Procrustean couch—all being the original implements—and thought the links sufficiently strong and massive to restrain any prisoner, however violent; nay, by bulls or tigers they could not have been readily broken.

On one side of this room, but close under the roof, a confined gallery exists, from whence relatives, or favoured curious spectators, could witness whatever mystical ceremonies might be performing below. Throughout the entire nine days—always considered essential towards ensuring recovery—*nine young virgins*, hired for that purpose, made a daily procession round the church aisles, passing *nine times* on their bended knees under St. Dymphna's tomb; all the time invocations being offered up for the chained maniac's recovery, at the same period that certain formulæ were gone through in the patient's presence; whilst a priest likewise recited prayers appointed for such occasions, besides imparting to his afflicted auditor religious consolation.

Formerly, proceedings like those detailed were much more common, than in the present enlightened age; and these brought, sometimes, a considerable revenue to the various performers. The maniac's board had to be paid to the owners of so famed an apartment, wherein the party was lodged. The priests received their "honoraria," and the *nine* young ladies did not chant, walk in procession, or even creep under St. Dymphna's relics gratuitously; but quite the reverse. Nay, if the patient could not attend personally, a substitute had to be hired to make the ceremony full and complete; the rule here being, as elsewhere, "*Point d'argent, pas de Suisse*." Hence, the expense of such performances proved often no trifle, but even of some amount. Although the superstitious practices just narrated appear almost fallen into desuetude; nevertheless, examples have occasionally taken place during very modern times, of which an instance was related, with all its details, which happened recently. But whether the poor maniac for whose benefit the ceremony was then

performed got effectually cured, my reporter could give little satisfactory information.

Sometimes, it was stated, persons have been brought hither, alleged to be insane from interested motives; and, if not really mad before, thus to try and make them so by cruel treatment, as the following authentic illustration, communicated by a medical friend of mine, who was consulted professionally, amply testifies. The father-in-law of an heiress much wished that young lady to marry his own brother, and thereby retain her fortune in the family. However, her heart being already in the keeping of a more juvenile and longer known suitor, she would not agree to any such money arrangement. This refusal enraged the proposers; and therefore a rumour was industriously spread abroad, that their intended victim had become crazed. To verify the fact more publicly, Miss — was in due time transferred to St. Dymphna's chamber; where, all the requisite formalities were followed, but without the desired result. Afterwards, the stepfather tried to obtain a certificate of insanity from Dr. —, in order that she might be consigned to an asylum; but the physician refused to grant any such document, as he could perceive no decided evidence of mental alienation. Fortunately, during several professional interviews with his patient, Dr. — heard the whole story, and how harshly this love-sick maiden had been treated. Whereupon, he took the proper steps to get her liberated from all control of either parent; and proving successful, she now lives elsewhere unmolested, the selfish brothers being thus completely balked of their greatly-coveted prize.

Notwithstanding the present sceptical world entertains much less faith respecting the sanative powers of St. Dymphna to cure mental diseases than formerly, but which prevalent incredulity fanatics ascribe to the wickedness of mankind; still, whenever the saint's annual feast-day occurs, viz., about Pentecost, thousands of people, from many neighbouring or even distant villages and towns, flock into Gheel, to behold the ceremonies which then take place, mix with the crowd, and otherwise enjoy themselves. During *nine days*, the saint's relics, with her shrine also, remain exposed in the church to public gaze; whereby, the assemblage of sight-seekers and idlers often becomes very great, whilst many devotees may even be seen crawling through the narrow passage under the hallowed tomb. After performing this act of blind devotion, these parties hope they will never afterwards become insane, through St. Dymphna's intercession. Whatever sensible people may think of similar proceedings, and of their saturnalian character, a large expenditure is thereby caused in the town; much to the advantage of shopkeepers, cabaret hosts, and the ultimate pecuniary profit of numerous inhabitants. On the last occasion

when this fête was celebrated—only a few months past—such an immense concourse of visitors then arrived, that Gheel was quite full for an entire week, and the streets seemed constantly crowded; all the time, most people appearing chiefly bent upon amusement, pleasure, and physical gratification.

Various authors might be named respecting the early history of Gheel, the discovery of St. Dymphna's remains, and the great reputation which this locality has long enjoyed, as a favourite refuge for lunatics; but one or two quotations will suffice. Thus, M. Gife states, in a work published by the Literary Society of Turnhout, that, about the seventh century, a chapel was built in honour of St. Martin, around which nearly 700 houses were soon erected. Again, M. Gazet says, in the Ecclesiastical History of the Low Countries, dated 1614, that, led by popular tradition and belief, the clergy searched for the bones of St. Dymphna and St. Gerebert, which they actually discovered—as he asserts—buried in two stone coffins, white as snow, although only dark-coloured rocks were found elsewhere. This peculiarly strange circumstance was therefore believed to have been the work of angels, to indicate these holy martyrs' candour and chastity. Lastly, in a volume published in 1658 by M. Craywinkel, attached to the Abbey of Tongerlo, it is gravely asseverated, "if the wonderful cures witnessed of insane persons resident at Gheel were not real miracles, at least they must be held as astonishing recoveries, effected wholly through the powerful intercession of the holy virgin, who has become patron saint of this locality;"—these facts being, he then adds, extracted from an ancient yet authentic register, belonging to the collegiate church of Gheel, and consequently implying that no mistake could prevail regarding such narratives!

The locality where insane patients have, during many centuries, been associated with the general population, constitutes part of the province of Campine, or "*Kempen-land*," which means, flat and without trees; whereof the capital is Gheel. The district now particularly referred to forms a level rather elevated plain, about three leagues in diameter, having a fertile soil, but surrounded, on several sides, by open sandy fields, or steppes of considerable extent; while turf being in many places dug as fuel, these parts hence afterwards seem very like stagnant marshes. The immediate environs are much more productive than adjacent districts, which still continue often covered with broom or stunted trees; whereby, this central division of the commune truly resembles an oasis in the desert. Again, the town itself occupies a moderate elevation, lying betwixt the river named the Great Nèthe, and the two smaller streams called the eastern Nèthes; but, as winter often proves severe from strong north-

east winds, and snow or frost, followed sometimes by hot summers, while damp weather is not uncommon, this portion of Belgium is not considered salubrious. Another drawback should likewise be enumerated; viz,—the water used by residents is so much charged with sulphate of lime, that it virtually becomes improper for domestic purposes. However, most excellent water could be easily brought by pipes from the sandy hills near Casterlé, towards Turnhout; which possesses such superior qualities, that parties have proposed to make a reservoir at Casterlé for the supply of Brussels.

Influenced by the causes just enumerated, intermittent fevers, typhus, and pectoral diseases in winter are by no means unfrequent; such results arising or being greatly promoted through the cold soil and humid habitations, occupied especially by peasants. Nevertheless, Gheel is considered a more healthy situation than the adjacent villages. It seems also rather pretty for a country town, has some good, and one long broad street; while the central square or "Place" is rather large, contains mostly two-storied houses, and several well-furnished shops; while the cathedral-church of St. Amand occupies one end of this enclosure. The urban population amounts to nearly 4,000 persons; that of the whole commune being at least 9000, of whom, on an average, there are always nearly 800 certified lunatics; thus giving one insane to every twelve sane residents.

Before proceeding to describe the chief features characterizing the lunatic population of Gheel, their general treatment and superintendence, some outline of the chief regulations specially affecting this singular colony will be neither inappropriate nor uninteresting. Besides the laws applicable to every insane asylum throughout Belgium, and being also placed under the inspection of the permanent commission charged with the special surveillance of lunatics, an additional code, or new "Règlement," dated 31st December, 1852, was promulgated by the Minister of Justice for its government, but afterwards modified by a late Royal Decree. According to these laws the colony of Gheel is now regulated, the chief authority being vested in a committee of eight members, who superintend the entire establishment. Of the above, four are annually appointed by the superior Commission, either from their own body, or of persons resident in the commune of Gheel, and places adjacent. To the parties thus nominated, the Minister of Justice adds four other members, taken from a double list of candidates submitted for his choice, by the communal council. Over this managing committee so selected, the Burgomaster of Gheel presides, or one of the sheriffs, who then has a deliberative voice. These officials are especially charged with the receipt of all moneys received as

board for lunatics; they pay disbursements, distribute the patients in different dwellings, besides watching over their interests and treatment. Further, the committee likewise see that the hosts and hostesses perform the duties required, towards any inmate consigned to their keeping. Every month, one member of the surveillance committee is nominated as visitor, whose delegated function is to preside when patients are admitted and discharged; but no admission or dismissal of any inmate can take place without previously consulting the inspecting physician.

All householders, within the commune, authorised to receive lunatic inmates as boarders, are divided into two classes, one being denominated "hosts," the other foster-fathers or "nourriciers;"—the former being those persons licensed to take insane patients paying at least 25 francs per annum more than indigent lunatics; the latter, or "nourriciers," comprising individuals who receive inmates at the minimum rate of payment. Both these parties are inscribed on a register kept on purpose; the distribution of patients newly arrived being made, as much as possible, according to rotation, still leaving relatives power to select any registered person with whom they would prefer placing the lunatic.

Unless under very particular circumstances, not more than three lunatics can reside in one dwelling-house, while two or more insane boarders are not allowed to occupy the same bed-chamber. Special sanction may, however, be granted by the permanent committee to admit a larger number, after they have received a report thereon from the divisional and inspecting physicians. When such exceptional permissions are given, the room occupied must always contain fifty cubic feet of air to each resident; the roof and walls being lime-washed, twice a year at least. Strict rules are also laid down respecting the furniture, the food supplied to inmates, and their clothing, which must consist of woollen stuffs in winter, with cotton in summer; but without distinctive patterns, or made like an uniform. Again, their body-linen should be changed always once weekly, or oftener when necessary, especially dirty patients. Lastly, no lunatic can be employed in any bodily labour, unless considered judicious by the sectional physician, and provided it does not induce injurious fatigue.

During summer, insane residents are not allowed to leave their domicile prior to six o'clock in the morning, or remain longer from home than eight in the evening; the hours being 8 A.M. to 4 P.M. in winter. They are not permitted to enter any cabaret, excepting tranquil patients who may require refreshment; but it is then expressly prohibited to serve even these with spirituous

liquors, and none can smoke near a stack-yard with uncovered tobacco-pipes. Other stringent police regulations regarding lunatics are in force, which it seems superfluous to mention specially. However, if any inmate escapes, the party with whom the individual lodged, besides losing all remuneration for those days the fugitive is absent, must pay three-fourths of the expenses incurred by recapture; the guardian of the section to which such patient belonged being mulcted the other fourth. Each lunatic has a book, or "livret," as it is called, in which, besides the name with various other particulars, all clothes supplied, payments made, remarks of sectional or inspecting physician, and observations by official visitors, are entered; so that, from this record, whatever is important or necessary to be known respecting any particular patient can thus be easily ascertained.

The entire commune being now divided into four sections, separately comprising a certain defined district, the total insane residents hence form as many distinct divisions; each having a head guardian, and one physician, to whom is committed the special medical care of every inmate belonging to that section. There is one consulting surgeon for the entire district; whilst over all is placed an inspecting physician, who of course possesses the chief authority in everything connected with medical treatment, and professional superintendence of the whole establishment. Four pharmaciens are likewise appointed, one of whom supplies any medicines ordered by the physicians or surgeon; each for three months alternately. When I visited Gheel last September, the medical staff was constituted as follows:—viz., Dr. Bulkins, the inspecting physician; Drs. Van Vitzén, Boeckmans, De Backer, and Verbist, sectional physicians; with M. Girolt as consulting surgeon; all well qualified officers for their respective appointments.

With reference to the duties of the inspecting visitor, it may be observed, he can enter at any time he pleases, and without previous notice, every dwelling within the commune. He may cause a patient to be produced, examine the room occupied, the bed, and clothing; also hear all complaints, or make whatever special inquiries he deems necessary; infirm, dirty, epileptic, paralytic, and helpless lunatics being considered the most worthy objects of attention. The visitor may also order the removal of any patient to another abode, should sufficient cause appear; or when neglect, cruelty, and improper treatment has been practised. Lastly, wherever a nourricier becomes convicted of having struck any lunatic inmate, unless it be conclusively proved that such act was solely and legitimately in personal defence, the offender is then stigmatized as *infamous*; and hence incapacitated afterwards to receive patients, until such ban is removed.

When I inspected Gheel, the total insane population under treatment comprized 774 persons, as previously stated. Of these, 409 were male and 365 female lunatics; the town, or first section, being then most numerous. One-half of the whole number were classified as capable of, and indeed actually employed in bodily labour, a large majority of whom comprized females; while the remainder were reported as idle or unable to work, the greatest number of that category belonging to the male sex. Amongst the total inmates, the largest proportion, or 350 cases, were examples of mania and its varieties. Dementia came next, of which were found 265 instances. Melancholia showed 60 cases. Epilepsy supplied 51 instances, the males being 25, with 26 females; whilst the remainder exhibited less marked varieties of mental disease. The 774 patients now enumerated were distributed in nearly *five hundred* different dwellings; whereof about 300 were cottages or farm-houses in the country, the rest being residences in the town of Gheel.

With regard to the various payments received for patients differently classed, it may be mentioned that the first division—comprising 49 lunatics—paid from 400 to 1200 francs annually, according to the accommodation supplied; the second—amounting to 147 cases—paid 300 francs; the third—including 266 individuals—275 francs, or 75 centimes per day; while all the rest, or fourth class—being 312 persons—were maintained by their nourriciers at the small sum of 238 francs per annum. These respective amounts included everything. But, however cheap food and lodging may still prove in “Kempen-land,” the actual profit must be almost *nil*, out of nine pounds ten shillings sterling; after feeding, clothing, and lodging an adult lunatic boarder. Undoubtedly, in many instances, their labour is given besides, but not invariably; and, although industrious working inmates are more in request than idle patients, parties must take their chance, with reference to such contingencies.

Accompanied by a head attendant, and the inspecting physician—Dr. Bulkins, who most kindly showed me everything worth noticing—I visited numerous houses in the town, and a great many cottages scattered over the adjoining country; in which, often one, although most frequently two, and occasionally three insane persons resided. That is the general system followed, with but very few exceptions; seeing, not more than five instances exist throughout the entire colony, where beyond four patients are placed with the same family, but only then for special reasons, and after an express authorization from the committee of inspection is obtained. Being occupied during two consecutive days in visiting various abodes, ample opportunities were thus afforded for seeing whatever was either interesting, important, or peculiar; and, con-

sequently, thus form some general opinion respecting the establishment. With reference to patients residing in rural dwellings, it should first be remarked that, amongst the seventeen hamlets of this commune—some being even like villages—in three no lunatics are received; and, however anxiously most householders often desire to obtain insane boarders, throughout all the neighbouring communes an opposite feeling is very prevalent.

Speaking generally, the sexes are usually lodged in separate houses. However, in regard to very aged persons, whose disease was chronic, and were of quiet inoffensive dispositions, a man occasionally lived in the same family where an insane old woman also resided. All suicidal, dangerous, homicidal, or mischievous insane patients are rarely if ever received as inmates at Gheel; while, on the other hand, should any resident subsequently come under these categories, they are forthwith sent home, or to an asylum elsewhere. Again, the authorities generally place boisterous, idle, or agitated maniacs in remotely situated and solitary cottages or farm-houses, which occupy the open heaths; where, such lunatics, having no neighbours, cannot disturb any person, or cause much annoyance. These, although excited or very noisy, may there walk about without danger to others or themselves; being thus placed beyond the observation of bystanders, not near similarly afflicted fellow-creatures.

When perambulating the various hamlets visited—often through pretty but devious pathways—we frequently noticed lunatics occupied as agricultural labourers in adjoining fields; whilst some were quietly walking to or from neighbouring cottages, quite as tranquilly as ourselves. Being all well acquainted with the inspecting physician, these parties saluted him respectfully, and often conversed with us familiarly; in short, they behaved like ordinary peasants, or any rational person. We saw others sitting at the cottage doors, and some looking out of windows; while several were amusing themselves with children of the family, in adjoining gardens or enclosures. In one of the public roads we met a maniac, who lived in a cottage at some distance, then carrying an infant in his arms like any nurse. He seemed to take great care of his innocent charge; and the physician remarked that such an occupation constituted this lunatic's chief enjoyment. Afterwards, we encountered another insane resident—a young man—amusing himself with three little children, romping with them, and at the same time taking care they did no harm. In a solitary lane, we next came up with a patient, who was being conducted homewards to dinner by the juvenile daughter of his host, after labouring in an adjacent field. In various other instances, we observed insane persons sauntering about; and some also going towards or returning from neighbouring farm-houses. In truth, had it not been from the vacant-looking

countenances noticed in most cases, and occasionally that their legs were loosely tied together by leathern thongs—so as to prevent the wearers from running fast, or going to any distance—I should scarcely have recognised many of the parties then enjoying themselves, while breathing the pure and open air of heaven, as real lunatics residing in the Gheelois commune.

Within the houses and cottages we inspected, many insane residents were occupied as ordinary servants; some superintending cows, churning, labouring in the barn, cooking food, cleaning the house, rocking the cradle, and taking care of the children; in short, employed much in the same way as they might have been at home, or out at service. Various male patients, again, were labouring in the gardens or fields; others working in carpenters' shops; also smithies, stable and farm yards; besides being engaged in such out-door employments as are common amongst any agricultural population;—these occupations having this very great advantage for lunatics, that whilst undergoing physical exertion—often so beneficial for their mental malady—they, at the same time, are much in the open air, breathe a purer and more salubrious atmosphere than most inmates of wards, day-rooms, or frequently too-confined work-shops, can enjoy in modern asylums. In several houses, we also observed female lunatics comfortably sitting with their hostess at table knitting, sewing, making clothes, and conversing as if equals, friends on a visit, or relatives. Such spectacles were truly pleasing; and when looking out of the cottage-windows near such parties, upon sometimes a pretty flower-garden, or towards open green fields, strangers could hence scarcely suppose, from outward appearances and surrounding circumstances, they were then visiting the chamber of an insane occupant, afflicted, most likely, with incurable mental alienation.

Of course, amongst the numerous lunatics distributed throughout the cottages in which such persons are lodged, many appeared as infirm of body as they were weak in mind. Several seemed very old, or quite imbecile, and utterly helpless. Some were dwarfs—males as also females; and one female cretin was recognised, although, on inquiry, I understood that similar examples of mental and physical degeneration have been lately of rare occurrence. All clothing is supplied by or under the administration's superintendence; and being generally of good quality, without adopting any uniform mode of dress, it became frequently very difficult to ascertain the demented member from among the sons, daughters, and even master or mistress of the household, where such parties resided. When talking to different individuals composing such family circles, I often could not distinguish one from the other, and, therefore, had to ask my medical cice-

rone, who always most kindly answered every inquiry, "which was the patient, or were any we then saw actually insane?" Considering the truly small allowance received for board and lodging of lunatic inmates living in such dwellings, their accommodation was good, beds clean, and other appurtenances seemed better than various sane members of these families themselves frequently enjoyed. How the householder could make both ends meet—to use a common phrase—without ultimate loss, appeared very problematical in many instances, considering the limited allowances often received by such parties.

To describe every object seen, during these rural perambulations, would prove both tiresome and superfluous; nevertheless, a few sketches as specimens of the scenes noticed, and patients then visited, may not appear altogether uninteresting. Thus, in an enclosed garden adjoining the cottage of the mad patient in question, an imaginary emperor—a little man—was vociferating and bawling to troops he then believed himself passing under review; ordering Marshal A. and General B., &c., to manœuvre according to imperial command. Our approach did not much disturb the phantoms of this visionary potentate, who merely then followed his daily amusement. In the kitchen of another hamlet, a schoolmaster—at one time the sage teacher of others—was now busily but silently engaged with superintending the brothpot, in which the family's dinner was preparing. This man had never spoken a single word for years; but being harmless, thus made himself useful. In a third cottage we found a male lunatic,—said to be sometimes excited—zealously nursing one child on his knee, and rocking a cradle, in which another lay asleep; while the mistress superintended her own household duties. Lastly, in a fourth, I could not avoid observing an old man peeling potatoes with a large knife in his hands, but whose arms were strapped by a leathern thong round his back, so as to prevent any lateral movement, while both legs were restrained by hobbles. This afflicted and often very dangerous maniac was still, in some degree, a free agent, to rise up when he liked, to walk out—slowly certainly, discontinue working, or, if it was more agreeable, saunter in the garden adjoining; but being restrained as now described, he could do no injury to others or himself. At least, such was the explanation then proffered to my inquiries.

In the more distant cottages, noisy and excitable patients are commonly placed, as mentioned previously. There, any disturbance or menaces have scarcely an echo. The lunatic meets no person; and living thus away from all neighbours, cannot create much annoyance. Being likewise free to wander—within a certain extent—amongst broom or heather, or over the solitary heath inhabited, a maniac thus often becomes tranquil, it is said,

from having nothing but silence or solitude around, and while meeting thereby no opposition.

Within Gheel itself, the better class of patients, paying the highest board, and generally those who are tranquil, or least excitable, for the most part lodge. We visited numerous insane residents, during varied urban perambulations, and were everywhere most courteously received. In several houses which belonged to respectable citizens, the lunatic inmate often seemed like one of the family, if not, indeed, the member most favoured; as well from occupying the best bed-room, as appearing also treated with marked kindness. If frequently difficult, when visiting the abodes of peasants, to know which person was the insane patient, it sometimes became even less easy to ascertain a similar fact, in various *bourgeois* residences. Several lunatics, well-connected, live with hosts occupying even the best dwellings in Gheel; and some inmates called upon seemed very comfortable. Others, again, belonged to the second and third class of patients; in which cases the hosts were usually either shop-keepers, tradesmen, or handicraft persons. Of course, their accommodation and general treatment then resembled, to a certain extent, that in villages; the allowances being analogous.

During these peregrinations, various interesting cases were met with. Amongst others, a most lamentable illustration of insanity attacking an entire family, for one generation, deserves being specially recorded; both on account of its rarity, and otherwise disastrous features. In this instance, four sons and two daughters were all insane; no other children being alive by the same parents. I visited two of these young men, and tall, fine-looking gentlemanly fellows they both appeared. Their brothers we did not see, nor the two sisters, who were then living elsewhere; but being, like the rest, equally deprived of reason. When speaking to these unfortunate insane youths (boarded in two separate dwellings) I was much struck with the calamitous condition to which this stricken family was now reduced; particularly as both father and mother were still living, and could have no prospect whatever of witnessing any change, but for the worse, befalling their entire progeny. As these parties were favourably situated, in regard to worldly wealth, with its oft much-prized enjoyments, and understanding no trace of insanity had ever shown itself on the side of either parent, the sad cases now quoted were therefore highly interesting; being also, in various respects, most remarkable. Parental bereavements like the above, consequently, become even much more deplorable, and deserve commiseration.

When walking about the town, I met several maniacs in the streets; some were enjoying a promenade, others seemed as if returning from their ordinary work, perhaps going homewards,

executing a commission for their employer, or otherwise employed. Such parties I only knew were patients from saluting the inspecting physician, or on being pointed out by that gentleman. One young man we encountered may be here specially mentioned. He was carrying an infant in his arms (according to the reply made to our question) home to its parents, in an adjoining street. This statement proved correct, as we subsequently met him at his own lodgings, after having safely deposited the juvenile burden just named with its confiding parents, devoid of any harm or detriment. The great fondness which is frequently exhibited, especially by male lunatics, towards infants and children, forms a marked feature of their conduct at Gheel. They very often take charge of a child in the absence of its parents; will romp with, or be amused by children's prattle; and, if excited, it is no unfrequent result to see tranquillity restored on the approach of such young friends. Sometimes a child will be sent to induce a refractory inmate to return home, when at work in the fields; and these messengers even succeed where older persons fail, or encounter difficulties. Various apt cases of this influence might be detailed, which are neither uninstrusive, nor superfluous.

The attachments which frequently take place betwixt parties having charge of lunatics, and the inmate committed to their care, are both interesting and remarkable. Numerous illustrations of this feature in the Gheelois character could be mentioned; but the following examples will suffice, which came under my own observation, or were communicated. When visiting one of the houses in town, where two lunatics had lived during many years with the same hostess, a scene took place which deserves record, both as a genuine outburst of nature, as also highly creditable to one of the party concerned; although similar instances of good feeling are by no means uncommon. After seeing the inmates and their rooms, we then had some conversation with the mistress of this household, who now intimated to the inspecting physician that she had determined to retire wholly from business—viz., keeping a shop and boarding lunatics,—in order to pass the remainder of her declining years in quietness, since she had saved sufficient means for her support, and was now getting both aged and infirm. "But," said the worthy old lady—full of emotion, and actually bursting into tears, "I am heartbroken at the thought of parting with my two poor afflicted friends," pointing to her boarders, "and know not how I can bear our separation. We have lived so long together, that to part is most painful, and I almost feel it will be impossible." This was true human kindness of the highest order, and deserving sincere respect; indeed, such amiable conduct ought to be held up before a selfish world, as an example for imitation.

In many instances, the host and hostess get so attached to their mad inmates, that they grieve when removed elsewhere, even on recovery ; but especially, if inexorable death steps forward to seize his prey. Two illustrations of such attachments recently occurred, which well deserve being now related, although other equally interesting examples might be added ; but the following are sufficient. In one of these cases, the hostess had for fifteen years carefully tended an inmate, whose friends always paid 300 francs annually. Having become reduced in circumstances, they resolved only to allow 250 for the future. Dr. — then proposed to transfer this lunatic to a cheaper house, and substitute another paying 300 francs instead. That proposition the party peremptorily refused, with the reply that, "being so much attached to her old, but afflicted patient, rather than make any change, she would keep the poor maniac for nothing." In another case, the hostess had four boarders, one of whom belonged to the lowest paying division, the others to a higher class. Being an excellent person and well-known for great humanity and attention, the relatives of one of the patients—then under her care—wished to place another member of their family in the same house ; also offering 200 florins annually. Having a licence to admit only four inmates, Dr. — proposed to remove the lowest paying patient elsewhere, and so enable Mrs. — to take the new and higher remunerating boarder. Notwithstanding the promise of double pay, she would not part with her old patient, who had lived in the house many years, and absolutely refused to adopt the suggested arrangement. My informant was so much gratified with this honest and humane person, that the Administrative Committee, on his representation, granted her a special licence to take a fifth patient, as she had otherwise adequate accommodation.

Similar traits of character are by no means rare amongst the inhabitants of Campine ; and observers have often remarked, when speaking of this district, that the natives are generally of humane dispositions, kind to each other, and industrious. They are especially conversant with insanity, and much attached to those who are the victims of that calamity. Having, also, been born, educated, and reared, nay, even passed their whole existence amongst lunatics—like the members of many previous generations dwelling in this commune—these peculiar features seem as if second nature, and may serve to explain what otherwise might appear incomprehensible. The Campinois people belong to the Flemish race, and are descended originally from the Normans and ancient Teutons. Hence, the present residents possess in some degree the qualities, bodily and mental, of both peoples. The men do not look as if apathetic or taciturn, but are often

keen-minded and also of quick apprehension; whilst the women, besides possessing an inborn aptitude for managing lunatics, are considered generally good-humoured. Having clear complexions, with healthy, well-formed physical conformations, they are said consequently to enjoy much repute as excellent wet-nurses throughout Belgium.

As might be inferred from previous remarks, it is chiefly upon the female members of a family that responsibility rests in managing the lunatic inmates committed to their superintendence. The male members of a household seldom interfere; unless where disturbances occur, or the insane lodger becomes so excited as to require the aid of physical strength, to restrain any outbreak, and so prevent dangerous consequences from ensuing. In our visitations, both in town and to country cottages, it was almost invariably to the female branches of a family—whether wife or daughter—that any inquiries respecting patients were addressed. These seemed always the presiding powers; while their subordinate instruments were frequently children or infants; the male members being usually passive agents, excepting when called on as assistants, upon an emergency. To describe their chief principles of action in a few words, one might briefly say, the system here pursued is based upon *mildness and force*. The first being personified and carried out by the weaker sex; the other through their husbands, sons, and brothers; where that proceeding becomes necessary.

Notwithstanding these and former statements, readers may perceive that personal coercion is still employed in the treatment of lunatics resident at this colony. Even by the rules, a host is permitted to apply the strait-waistcoat, leathern girdles, hobbles, or strong trousers; and to use other kinds of physical restraint, “which have been approved by the inspecting physician, when such means are urgently required.” But in all these cases, immediate information must be transmitted to the sectional physician, and receive his sanction; who forthwith makes a report of every circumstance which had occurred to his superior, the inspecting physician. However, should any patient have suffered personal violence, or the unnecessary application of bodily restraint be ever employed, the offending party will not only then lose his or her licence, but may be also prosecuted for damages, and punished for such transgressions.

Compared, certainly, with former years, nay, even subsequent to the visit of Esquirol—when it was no uncommon spectacle to see patients wearing iron chains, walking about in the vicinity of villages, or in the lanes and streets of Gheel—all physical restraint, besides being now of a much slighter description, seems, likewise, far seldomer employed. If used, it is chiefly of the arms,

in order to prevent personal violence upon others; although sometimes the lower limbs likewise, lest excited maniacs might escape into the fields, run recklessly through the town, or even disappear altogether. As an ordinary remedy, restraint is strongly condemned by the medical authorities, and ought only to be applied exceptionally. In illustration of this important question, and to show the exact extent of personal coercion actually in force, when I inspected the colony, it should be stated that, amongst the total 77½ lunatics then resident, twenty could neither walk fast nor take long steps, in consequence of hobbles on their ankles; five had both legs and arms tied more or less loosely, most of these cases being male patients; whilst eight individuals, chiefly females, wore a camisole, because they were clothes-destroyers and erotomaniacs. Thus making altogether 33 examples; or one case of restraint in nearly every 24 patients. Most of the above lunatics, however, were either sauntering about cottage-doors, or walking slowly in the roads and lanes. Again, others seemed sitting quietly within, but doing nothing; while a few were occupied in household employments, notwithstanding their being then under bodily restraint. Disapproving of physical appliances, it must still be admitted that, here the application of such means is virtually very different in effect from the treatment often pursued in continental asylums.

Although restraint is not yet wholly discontinued at Gheel—as proved by the previous faithful report of its extent and form, observed during my recent sojourn—it cannot be denied but some inconvenience, and even occasionally lamentable, if not fatal consequences have occurred, through the great personal liberty which most patients usually enjoy, while residents of this commune. Quarrels sometimes take place in the streets; patients get excited by incidental causes, that cannot but occur where so much individual freedom everywhere prevails amongst the lunatic inhabitants. The sexes are not so very rigidly kept apart, as at ordinary institutions; whilst, in a district where nearly every tenth inhabitant is really insane, it must be expected almost as a natural consequence of their peculiar position, and mode of living, that agitated and dangerous persons should be either most strictly watched, placed in seclusion, or otherwise secured against doing harm to others and themselves; whereof a terrible instance may be here quoted, which actually happened at no distant period. A male lunatic, having taken offence at being reproved by the then Burgomaster, because he received money from poor people, by pretending to cure various diseases, and for otherwise misconducting himself, threatened that chief magistrate with personal violence, and also said publicly, he would be revenged. The Burgomaster, unfortunately, disregarded these menaces, and therefore adopted no precautions to protect himself

against harm. However, one forenoon, when he was passing along the public street, this furious maniac darted out of an adjoining passage, and suddenly stabbed his victim in the back with a knife; whereby M—— got mortally wounded, and died soon afterwards.

Happily, similar instances of violence occur very rarely; whilst illustrations of quite an opposite description might be easily enumerated. But one case will be sufficient on the present occasion, which shows the benefits of removing restraint, where it had been apparently used from dire necessity. Some months ago, an excited patient was brought to Gheel, tightly bound down with ropes to a hand-barrow, upon which he then lay, more like a sack of corn than a human creature; being accompanied, besides the porters, by two men as guards, to ensure safety, while others had been required to secure him, in the manner previously described. Very soon after arrival, this individual was freed from all bodily ligatures, and placed with a peasant experienced in the management of violent maniacs. The lunatic, at first so outrageous, quickly became tranquil, through kind treatment received from his host and hostess. He then began to assist the family in domestic duties, and afterwards went about the garden; till ultimately, his docility and obedience to orders became so marked, that hopes of recovery now seemed well-founded. When passing near the abode of this but recently frantic, and most dangerous patient, we met him tranquilly walking along the road, led by the hand of his hostess's young child, who had been purposely sent by her parent to a neighbouring field, where he was at work, in order to conduct him safely homewards; which the little messenger accomplished successfully.

Struck with the above instance, as also several analogous cases, where young children took charge of lunatics, I made especial inquiry to ascertain whether accidents did not sometimes ensue, from placing such confidence—as similar proceedings implied—in the tranquil conduct of insane persons, should they get excited from slight causes, or unexpectedly. In reply to these questions, I was informed that disastrous results very rarely supervened. Frequently the reverse occurred; since most lunatics are very fond of being in children's society, whilst their talk often proved tranquillizing, and seemed really even to contribute, if not towards their recovery, at least materially to assist in rendering them more manageable; judging from appearances.

The chief feature characterising this colony being that of almost universal personal freedom, in so far as locomotion is concerned, and as the lunatics generally pass much of their time in the open air, or out-door employments; besides, seeing no dungeon walls or even fences exist to curtail their promenades, while going about the country in bye-ways and roads, like ordinary

labourers, it therefore cannot appear singular, if attempts be made to escape; nay, are occasionally successful. Nevertheless, only *eleven* instances of that kind occurred throughout twelve months ending the 1st of last September, according to a register kept by the secretary, M. Yerelst, and of which he kindly gave me an official extract. As the expenses of recapture fall upon the housekeeper where the fugitive resided, and who farther receives no allowance during such absence, it becomes the interest of every person to prevent patients escaping; while the local police, besides the gendarmerie of neighbouring communes, being always on the out-look respecting runaway lunatics—for which duty they are rewarded—actual escapes hence become very difficult of accomplishment, as shown by the return above quoted. Indeed, considering the great personal liberty enjoyed by so many lunatics as 938—the entire number under treatment at Gheel throughout last year—it cannot seem surprising should escapes supervene. On the contrary, the fact of so few as only Eleven instances having actually taken place during twelve months, appears even less than might be expected under ordinary existing circumstances.

Upon this point it seems of importance to refer to similar occurrences at other establishments; as, for instance, to the Maréville Asylum, which contained, at the period of my visit, some years ago, 876 lunatics, and, therefore, having nearly the same insane population as that of Gheel. Notwithstanding the *surveillance* exercised at this institution, and although it is enclosed within walls or fences, *nineteen patients escaped* during the year embraced in the Report I published respecting Maréville in No. XVIII. of the *Psychological Journal*. Analogous facts might also be mentioned in reference to other institutions; and therefore, instead of being considered as any objection to Gheel that patients may run away, the proportion even appears less than in some modern asylums, with all their appliances to prevent such contingencies. Rather, the wonder is, truly, that not more than eleven lunatic patients did then take advantage of the liberty they enjoy, and make their escape from Gheel.

Regarding the general movement of insane residents under treatment, during the period referred to in a preceding paragraph, namely, for one year up to the 1st of last September, the new entries of patients amounted to 137; the number cured were only 29; those transferred either to other asylums, or removed by friends, prior to convalescence, were 50 altogether; whilst 74 died. The ratio of deaths hence exceeded, by more than double that of recoveries; which latter, if calculated according to the number admitted, consequently gives about 22 per cent. of actual cures. This proportion certainly appears very small; but

considering the numerous incurable cases, their long continuance, feeble physical frames of many inmates, often advanced age, and lastly, the utter hopelessness of ever effecting much, or even any good, in a very large number, may account for such unsatisfactory results, as also partially explain the large amount of fatal terminations. However, respecting recently recorded mortuary details, it may be briefly remarked, that the most frequent apparent causes of death reported, were apoplexy, phthisis, epilepsy, and general paralysis; although many finally succumbed, in all appearance, from old age and exhaustion; or, according to popular phraseology, "*vieillesse et marasme*."

The large number of fatal cases, now enumerated, do not constitute an unusual amount of mortality, when contrasted with returns of previous years. Thus, amongst the lunatics belonging to the hospice administration of Brussels, which averaged during 1849, usually under 350, and of whom 72 were new admissions, the cures did not exceed 58 cases; while 32 deaths were reported. In 1850, with an average population ranging about 345, and of whom only 46 were recent entries, not more than 17 recovered; whereas 25 died. Amongst which category, it deserves being stated that 10 of the deaths were of old men who constantly had resided in Gheel since 1803, or 47 years at least, whilst one patriarch was on the verge of becoming a centenarian. Such facts seem conclusive evidence, not only of the care bestowed upon lunatic inmates at that colony, but likewise, of the advanced age which they occasionally attain. Further, during 1851, which showed 55 new admissions, and an average of 325 resident patients, 30 died; while only 9 are reported to have recovered. These figures are now quoted to prove that the casualties observed during the past twelve months greatly resembled those met with in other seasons. But better comparisons may be made with the actual movements of patients, recorded during two of the above specified years, throughout the entire colony. For example, in 1849, with a total population of 980 lunatics, the new admissions were 164, the numbers cured 75, the deaths 82, and 11 escapes. Again, during 1850, when the aggregate numbers had fallen to 931, the new cases were 152, cures only 38, and 67 deaths, whilst 10 escaped. The above statistical data—all taken from authentic sources—consequently show that, at this colony, last year's experience varied very little from previous similar periods.

Among the numerous insane residents at Gheel, besides workmen and artists of various kinds, painters, professors of languages, also of music, schoolmasters, governesses, literary persons, and so forth, may be frequently recognised. An interesting example of that kind occurred many years ago, which deserves mention—viz.,

that of a celebrated violinist, who then became an inmate. This gentleman, having still great love for his art, established musical meetings to amuse the patients; he being leader. That step led to the erection of a large hall—yet existing, in which the founder's portrait now occupies a prominent position. Ever since, similar reunions have continued to assemble in this building, which give much pleasure both to spectators and performers, of whom a proportion are patients; while many also belong to the middle and upper classes of the general population.

Instances have occurred where patients, after they had entirely recovered, felt so comfortable with the parties under whose roof they were placed, and with their abode, that instead of returning home, preferred remaining as boarders with those new friends, from whom they had experienced much kindness and attention when insane. Many such examples might be detailed, but one is sufficient. An insane female, after being some years resident with a *nourricier* at Gheel, became convalescent. She, however, would not depart, but remained permanently. When asked the reason of her unwillingness to leave, replied naively, "I am accustomed to this worthy family, and feel happy. I have known these two daughters of my kind friend here, ever since they were born. I love them like my own children. I am poor, and have no relations; therefore where could I go and be so very comfortable as here? So move I wont!" This was said to the narrator of the above anecdote, after the aged speaker had resided twenty years in the colony.

Although, as a rule, lunatic inmates are not allowed to visit any *cabaret*, tranquil patients may have that permission, at proper hours. Hence, it is not uncommon to see insane guests sitting at the tables of such places of entertainment, either smoking their pipes, amusing themselves with playing cards, or engaged at billiards and dominoes, all the time sipping their beer; while others again are talking together, like any ordinary frequenter of coffee-houses, and from whom they are scarcely distinguishable; at least by casual observers, who, similar to myself, only looked into these apartments out of curiosity, when passing their thresholds.

Acknowledging, without reservation, various peculiar advantages possessed by Gheel, as an establishment for the reception and care of insane persons, embracing certain categories; nevertheless, if compared with some modern asylums, in several features it seems defective. Although not surrounded by high walls, having no securely-locked wards, with often confined and over-crowded dormitories, in which numerous inmates seldom breathe an uncontaminated atmosphere, and then rarely, if ever, associate with sane fellow-creatures, but almost continually dwell in the often baneful society of other lunatics—whereby they become wholly deprived of

many social enjoyments, which frequently prove alike advantageous during the treatment of mental, as in physical maladies—the insane colony now under review requires, nay, imperiously demands, various important ameliorations for the relief of suffering humanity. Of these, the most essential and urgent, at present, is an infirmary, adequately large and sufficiently commodious, for its existing numerous lunatic population. This great desideratum has long been acknowledged. But notwithstanding the official reports recently made thereon, and although the subject has been very often discussed, while authorities have strongly recommended the establishment of so necessary an appendage to every asylum, as the one in question, nothing by any means sufficient has yet been accomplished towards remedying the present great deficiency above specified.

A small house or cottage has, no doubt, been appropriated for receiving new admissions, previous to placing such patients in any permanent abode, and where one or two sick persons, on an emergency, might be treated when labouring under physical disease, instead of remaining at their ordinary domicile. Still, the accommodation supplied is altogether inadequate for that purpose; but especially for observing recently arrived lunatics, so as correctly to ascertain the specific character of their mental disease, previous to locating them permanently elsewhere. This objection being even more applicable, when attacked by acute cases requiring much personal attention, and constant medical superintendence.

An infirmary containing from fifty to sixty beds would prove sufficiently ample for every requirement. The locality selected ought to be central, salubrious, and in an elevated, open situation. The vicinity of St. Dymphna's church has been proposed; and, certainly, this position possesses several recommendations. Wherever the new infirmary may be ultimately erected, 50,000 francs would be judiciously expended on such a building, and could not but confer great benefits on the lunatic population of Gheel; irrespective of important collateral advantages to its general population, by thus holding out an additional means for properly treating those who might be sent here as patients. To accommodate 800 lunatics—the average ordinary number at this colony—several millions of francs would be required to construct two asylums, even of an ordinary description; while a much larger expenditure must be incurred, were these structures made palatial, or like some which oftener seem rather built for external show, and to attract outward admiration, than invariably for their interior convenience and useful accommodation.

Neither Government nor provincial ratepayers have ever expended any large sum, on purpose to procure house-room for the numerous lunatic population resident at Gheel. The annual outlay

required from different communes is exclusively paid on account of the care, keeping, and maintenance of their indigent insane; not to reimburse any expenditure on buildings. Indeed, the allowance, which frequently averages about £10 per annum—every item included—being less than that often paid at ordinary asylums, even in Belgium, for pauper lunatics, and where thousands of francs have been spent on buildings, there would be true economy in the proceeding advised. Hence, it proves much more advantageous, pecuniarily considered, to place insane patients at Gheel; seeing neither the communes nor public treasury are required to make any considerable outlay, as a commencement. Whereas, such results almost invariably happen elsewhere, in reference to similar institutions. Viewed, therefore, even as a money question, besides under various other aspects, Government should not hesitate to build an infirmary, and also to institute other improvements now admitted as absolutely necessary. Much has certainly been accomplished of late years, to ameliorate the condition of resident lunatics. The new system of management adopted has already produced beneficial effects; and although local authorities may thereby have been curtailed in their former powers, especially with reference to patronage; whilst individual jobbers can no longer successfully pursue their profitable vocation as heretofore; still, many helpless patients have derived important advantages, through several judicious changes already established.

When impartial observers reflect that about 250,000 francs are annually paid to upwards of 450 different householders, for the maintenance of nearly 800 insane boarders, distributed amongst the various families just enumerated, it will be at once perceived, of how much importance such an expenditure becomes to the entire community. In truth, the large sum so received constitutes their chief revenue; quite as much as cotton-spinning in Manchester, or working in metals at Birmingham. Take away their lunatics, and the Gheelois commune would be utterly ruined; unless some new employment or industry were substituted.

In a former page it was stated that Gheel, and its immediate precincts, formed almost an oasis in the surrounding desert. Indubitably, the continuous residence of many hundred lunatics, during nearly twelve centuries, has essentially contributed towards rendering an arid sandy soil—naturally unproductive—into fertile fields and fruitful gardens, notwithstanding its often cold or ungenial climate. Well may modern authorities and natives celebrate the fête of St. Dymphna; for truly to that saint originally belongs the long-continued fame of this locality, and also the marked improvements in its soil just mentioned. While again, to such named influences are mainly owing whatever advantages it now possesses over adjacent communes. Hence, much material

wealth has been diffused, not only amongst past generations, but residents of more recent times. Had analogous establishments been placed in a sterile highland moor, which originally produced nothing but heather and grouse, or on any Sussex down, where hitherto sheep-grazing seemed its only profitable destination, assuredly both places would have also become, through the continued labour of lunatics, equally productive with this district of Campine. Were such experiments tried, of course many years, perhaps several consecutive centuries must elapse, before similar results could be reasonably expected. Nevertheless, the conclusive exemplification, described in these notes, amply shows what may be accomplished, through the continued physical efforts of numerous individuals congregated together; notwithstanding they may be all victims of mental alienation.

One great and truly peculiar feature, which has, during now many centuries, always characterized this singular colony, ought never to be forgotten—namely, when lunatics, everywhere else, were too often treated more like so many wild animals than as human beings, and even frequently chained, or lying on straw in dark noisome dungeons, here, the sufferers from similar mental maladies breathed an open, more healthy atmosphere, lived generally quite free, like other members of the family where they resided, and in whose occupations, enjoyments, or even annoyances, they often participated as ordinary inmates. Indeed, many never suffered from any bodily coercion, unless under certain circumstances. In fact, *No restraint* appeared the great maxim at Gheel; physical confinement being the exception. Whereas, throughout the civilized world generally, restraint—frequently of the most severe description—was formerly almost the invariable rule, bodily freedom proving then of exceedingly rare occurrence.

But however remarkable this ancient rural refuge, for demented members of frail human nature, may appear, and although in operation now during many hundred years, the locality and its famed attributes were always, and even now still continue, very imperfectly known, not only to an ignorant public, but even by the medical profession, who, generally speaking, remained, unless to a very limited extent, scarcely cognizant of Gheel's actual existence. Recently, the colony has become somewhat better understood. Again, since various reforms have already been effected, besides others now in progress or proposed; while the facility of travelling thitherward is at present reduced to a forenoon's journey from Brussels, with the certainty of obtaining every personal comfort visitors could desire, when residing in Gheel; doubtless foreign physicians will very soon become as familiar with *Kempen Land*, and its peculiar features, as they are now in regard to most European districts and their peculiar institutions. Whether

such extended knowledge may lead to the establishment of similar insane colonies in neighbouring countries, at present seems problematical; although many strong arguments might be easily advanced in support of that proposition. This much certainly may be said, no asylum for lunatics throughout the universe can boast of having had such a lengthened experience as the one in question. That assumption, at least, I firmly believe, cannot be disproved, with any show of reason.

Notwithstanding the prestige of great antiquity; the acknowledged physical benefits so frequently produced; the freedom which now most patients enjoy—even greater than ever; the almost general adoption of "*no restraint*," and many other advantages—to say nothing of recent ameliorations effected, or seriously contemplated—an opinion exists in some influential quarters that, instead of still further improving the colony of Gheel, it ought to be entirely broken up and discontinued. In short, the insane inmates should henceforward be consigned to public asylums, shut up within four stone walls, only associate together, and never be allowed to enjoy the society of their own fellow-men, until they also have become victims of mental derangement. No greater and more disastrous mistake could be committed, than to carry out such an absurd proposition. Correct abuses; still further improve internal discipline; remunerate the medical staff more liberally; make the communes pay higher allowances for their pauper patients, so as to ensure increased comforts to such sufferers; supply additional means towards promoting trades and manual employments amongst men, as also work for women; and lastly, but still not the least essential, forthwith establish an infirmary both for the temporary reception of acute cases, and of those inmates who may become attacked by physical disease. Doing these things effectually, in my opinion, would be the most proper course to pursue—not, certainly, by adopting any thoughtless scheme of destruction.

Instead of committing such an act of sheer Vandalism, insane rural colonies should rather be established elsewhere, and thereby take advantage of former practical knowledge—based upon the long experience thus obtained. Other countries might even advantageously imitate the example here furnished—which appears, for many reasons, truly philanthropic—in place of always erecting immense prison-looking buildings, or large, magnificent, palatial residences, for pauper lunatics, which are wholly at variance with all their previous habits, lives, or associations. Besides these reasons, asylums become not only very expensive, both in construction and management, but frequently prove not the best adapted for protecting, treating, or occupying judiciously that class of the population.

Nowhere in Europe is any analogous establishment to be found—at least, within my knowledge. At Zaragossa, in Spain, an insane colony was said to have formerly existed; but to what extent, or if it still receives any inmates, I am unable to procure certain information. However, Iberti, an author of repute, when mentioning this institution in 1791, says—“Here, lunatics have been employed, long prior to the present period, in daily labour, either within the hospital, or adjacent fields.” Afterwards, the same authority adds, “that rich patients who did not engage in manual occupations rarely recovered.” These quotations, therefore, become both conclusive and interesting. Again, in the north of Scotland also, about the middle of last century, a farmer then obtained, it is said, considerable celebrity by the treatment successfully pursued with insane persons, whom he took as servants and labourers, to cultivate his farm, or to pursue various out-door manual employments. The place was, in fact, another Gheel, although upon a very limited scale. How long this small lunatic colony continued in operation, or with reference to its particular features, even rumour is now silent; and the fact of such a place having once existed seems now almost, if not wholly, forgotten.

Indubitably, the principle then acted upon continues recognised, as incontestably shown in many recently-erected county lunatic asylums, where large farms and gardens are frequently now attached, so as thereby to occupy patients in open-air labour, rather than confine them in close wards, waiting-rooms, and workshops; or even placing such parties in walled court-yards, however spacious. Virtually, therefore, a fictitious or rather miniature Gheel is often now appended to various public institutions for the insane, but without possessing the peculiar advantages characterizing that unique establishment—viz., domestic association with sane persons, as likewise, the demented living usually at large, among ordinary workpeople. Irrespective of several drawbacks, these agricultural appliances are nevertheless most beneficial. Consequently, their operation should be greatly extended, so as to become, in a higher degree, both useful and sanative to numerous inmates.

In addition to the examples above quoted, an important application of a similar system at the Devon County Asylum, during the past year, deserves being mentioned. According to the Report of that institution for 1856—drawn up by its able medical superintendent, Dr. Bucknill—“a limited number of patients have been discharged on trial, and boarded with neighbouring cottagers selected as trustworthy and suitable persons. In several instances the women of these cottages have acquired some experience in the right management of the insane. Some of them

have been employed as occasional attendants in the wards of this asylum ; and others, having been attendants or domestics in the asylum, have married asylum artisans, or other persons living near. This experience has made them willing to accept, and qualified to undertake, the charge of such inmates of their houses. Both the patients and the persons having charge of them feel themselves under the eye of the medical superintendent, who visits them unexpectedly. The plan promises to work well. The patients are happy, and extremely well satisfied with the arrangement." In a recent letter with which I was favoured from my friend Dr. Bucknill, that gentleman further says :—"The cottage treatment of a few selected patients mentioned in my last Report has fully answered my expectations. The patients are contented and happy, and bear willing testimony to the kindness and consideration of their hosts." This forms a good commencement, and, if carried out further, will doubtless prove equally satisfactory. Considering that the average primary outlay, of most public lunatic asylums, ranges about £200 per patient, an annual expense of nearly £10 is thus incurred, before any inmate can be fed, clothed, or treated. Hence, it appears the buildings in which the pauper insane of England are placed, alone cost the country quite as much as lunatics of the same class in Belgium usually do for lodging, support, and every requisite. These are important considerations, and well deserve the mature examination not only of ratepayers, but philanthropists. At the same time, seeing a successful beginning has been already made at the institution just named, such an excellent example becomes more worthy of imitation elsewhere.

Before taking leave of the ancient and truly interesting establishment, which has formed the subject of previous remarks, two most important questions therewith connected, at least deserve some special observation—namely, does the residence of so many lunatics in this commune, their free intercourse with the general population, and the association of sane and insane persons—ordinarily without restriction, influence the mental condition of the rising generation? Again, do immoralities ever supervene, in consequence of the two sexes being in the habit of often meeting each other, as if actually living in common worldly society? Upon both these topics, no opinion can be more valuable or conclusive, than that of Dr. Parigot, who resided, during several years, as inspecting physician at Gheel, and had thus ample opportunities for making valuable observations.

In reply to the first question—viz., whether the association of insane persons with the general population actually produces any injurious effect upon the mental condition of natives belonging to this commune? Dr. Parigot very obligingly wrote me as follows.

I give his observations in the original French, so as not to weaken their force or significance, by translation :—"Je vous dirais qu'au premier abord, lorsqu'on voit ce qui se passe en général à Gheel, on serait assez tenté de croire les Gheelois, si non fous, au moins assez excentriques. En second lieu, un étranger, s'il s'en rapportait à ce que disent et racontent—1^{mo}, les villageois et citadins qui avoisinent Gheel ; 2^{do}, les membres de l'administration provinciale et ceux du tribunal dont Gheel ressort—il s'en irait convaincu que les Gheelois ont subi l'influence du contact de leurs aliénés ; car toutes les personnes qui ne sont pas de Gheel, moitié par dérision, moitié à cause des faits qui arrivent à leur connoissance, et dont ils ont à juger, les considèrent comme des aliénés ; de là, sobriquet *Gheelsche Zotten*. Toutefois, mon expérience n'est pas d'accord avec ces données, et j'ai remarqué—1^{mo}, que Gheel ne fournissait relativement pas plus d'aliénés que les localités voisines ; et 2^{do}, que les excentricités apparentes dépendaient de causes amenées plutôt à la suite des aliénés (comme la somme de 250,000 francs qu'ils apportent à Gheel), que par le contact des aliénés. Je m'explique ; vous savez qu'il y a deux espèces de Gheelois—l'habitant de la ville même, et celui de la campagne de Gheel. Le premier a plus ou moins abandonné le travail des champs pour le commerce de détail, ou pour la spéculation, même celle de se charger de *l'entreprise des aliénés*. Le second est resté campagnard, et est devenu avec l'aliéné l'objet de la spéculation du citadin ; aussi, le paysan n'est point en question, quand on parle des Gheelois ; mais le citadin spéculateur et fainéant, grand beuveur de genièvre, est devenu difficile à conduire, assez chicaneur, entêté, et fortement excentrique. On ne peut pas nier non plus que cette grande habitude du *laisser faire* pour les aliénés n'ait contribué à relâcher sa manière de voir les choses, ses conceptions, et que sa volonté n'ait subi une certaine modification, tant sur le contrôle de soi-même que sur les actes ; mais, cependant, tout cela n'est pas de la folie. Au reste, vous concevez, Monsieur, que si le principe de la contagion de la folie était admissible, Gheel, depuis le temps qu'il est soumis à cette influence, ne serait pas un *peu excentrique*, mais, *bien fou à lier*—ce qu'il n'est pas. Au contraire, j'ai toujours admiré, au milieu de bien de défauts, l'immense charité et l'amour souvent désintéressé des habitants envers les aliénés, par le temps qui court en vue de ce que la soif de l'or produit dans le grand monde. Le désintéressement n'est-il pas aussi de la folie ?

With reference to the second point of inquiry—namely, do immoralities oftener supervene amongst the insane residents of Gheel than elsewhere ? Dr. Parigot likewise observes, in answer to that equally important question—"La vie de famille est la

véritable et unique base du règlement de police intérieure de Gheel. C'est sur elle que se modèle la vie des aliénés, et leur moralité en dépend. Dans les familles on ne sépare point les sexes ; et cependant, il est infiniment rare, qu'il s'établisse des rapports criminels entre les membres. Les aliénés étant, chez les Gheelois, admis sur le pied d'enfants, qu'il faut *conduire* et *surveiller*, j'attribue à cette surveillance intime, plus qu'à toutes les recommandations de l'administration, de n'avoir trouvé en sept années que quatre cas de grossesse parmi les aliénées ; cependant, ces dernières sont en moyenne en nombre de 500. Mais, ce qui ne doit point vous échapper, c'est qu'à Gheel peu d'aliénés sont inoccupés, surtout les femmes valides ; et que justement, ceux dont les instincts animaux sont le plus développés, se trouvent dans ce dernier nombre, et seront ceux qui auront le moins d'occasion de s'y livrer. Enfin, le nourricier considère un pareil fait dans sa maison comme un *deshonneur*."

These observations being based upon extensive personal experience, must carry conviction, in reference to the points now mooted ; more especially, as Dr. Parigot's conclusions coincide with those enunciated by other authorities, equally competent. Although any remark of mine on such subjects would be valueless, I would nevertheless observe that Gheel seemed a very quiet town, considering its size. Indeed, it was certainly much more tranquil than many other localities I could name—numbering 4000 residents. During daytime, nothing unusual occurred ; whilst at night, silence and repose reigned, apparently, everywhere supreme. Nay, an unusual quietude even prevailed when an infantry regiment—about 1000 strong, and returning from the camp at Beverloo—passed through Gheel ; where they were billeted with the bourgeois population, during one of the nights of my sojourn there. Greater bustle and confusion would have certainly ensued in most English or Scottish towns, by the marching in one day and out the next, of so large a body of soldiers, headed by their military band, than then prevailed. The absence of any excitement was indeed remarkable. Hence, were I to hazard an opinion, derived during my brief residence in Gheel, it would be that the capital of Campine seemed more orderly, and less noisy, notwithstanding 250 free lunatics dwell therein constantly, than almost any other equally populous place possessing only sane inhabitants, which I had ever previously visited. Such a remark, however strange it may perhaps appear, being really no exaggeration.

Although neither peculiar to this locality, nor uncommon, still as the immediate vicinity of Gheel supplies an instructive illustration of what may be accomplished, in originally an unprofitable soil, by human labour even of lunatics, if applied consecutively to

its cultivation, I would specially direct attention to the district in question ; seeing, it has thereby been changed from an almost Siberian desert—as various environs even yet remain—into cultivated fields highly productive. Instead, therefore, of constructing new palatial asylums, which is now often the case, in situations where the ground proves valuable in consequence of its fertility, public authorities should profit by the results noticed at Gheel, and henceforward locate all future county institutions for lunatics on moors or waste commons, in place of purchasing, sometimes at an exorbitant price, tracts of ground already in cultivation. Of course, the district chosen should possess ascertained salubrity. This step is too frequently adopted because the position selected seemed beautiful, and might, in consequence of an elegant architectural structure afterwards erected thereon, become the admiration of passing travellers ; and would then be pointed out as strong financial evidence of county magistrates' liberality, besides showing the great care they take of their pauper insane.

Intimation having been officially given to the metropolitan county magistracy, respecting the necessity of erecting a third public asylum, that proposition therefore supplies a good opportunity for carrying into effect the principle now enunciated. If such movement be made, few places really seem better adapted for that purpose than Hounslow Heath. Sufficient ground could be there easily obtained, which must doubtless become, were a large population constantly located, much more productive than at present ; while it would supply an ample space for out-door physical labour. However, any suggestion now mooted being only shadowed forth for subsequent consideration, I need not further pursue the inquiry. Still, having witnessed very marked beneficial results, which an analogous mode of proceeding has effected in the bleak "Kempen Land" of Belgium, similar consequences would most likely follow, I really believe, were an analogous, or even a partially similar institution established on any barren but healthy heath, within the limits of Middlesex.

General Remarks.

Compared with various public asylums of France, Scotland, or England, many insane establishments of Belgium are very far inferior, in reference to the accommodation they supply. Several old convents—never constructed for the reception of lunatics—having been appropriated for such purposes, easily and at once explains the marked difference which often prevails. Viewed, however, in regard to their condition, prior to the governmental inquiry, not many years ago, great improvements have certainly taken place since they were placed under public inspection.

The most objectionable are suppressed ; and others having undergone important ameliorations, it must be acknowledged, much real good has recently accrued throughout numerous institutions. Take, for illustration, a Report of the Commission of Investigation for 1841, wherein it is stated, "In nine establishments visited, we found iron fetters and chains were used ; and in seven others, their employment was suspected ; whilst blows and bad treatment, inflicted upon inmates of certain asylums, were too real and too frequent."

Contrasted with this sad statement, reference may be made to the Commissioners' Report for 1853, which observes, "The publicity given to several deplorable facts previously reported has attained the object proposed ; various barbarous instruments, which proved the absence of science as of humanity, are now banished to the museums of antiquarians." Again in 1856, the same public authorities report that, "reforms have been introduced in different asylums, with reference to their domestic arrangements ; important modifications are made in others affecting the comforts of inmates ; various buildings have assumed a more pleasing appearance ; wards seem better furnished ; greater order prevails ; services are performed with more precision, and the surveillance of patients is better understood. In fact, most Belgian asylums have now entered on the path of decided progress." When the new building close to Ghent is completed, the advance must, doubtless, become even more rapid ; as then, assuredly, that public establishment for the insane, besides leading to the erection of similar asylums elsewhere, will, moreover, serve as an excellent model for imitation throughout the whole kingdom.

Belgian lunatic institutions are generally distinguished, from those of most European countries, in being very often exceedingly small, and from having usually but few inmates ; whereas, the latter are large, and often very populous. Many were originally founded by religious congregations, and even still continue under the management of clerical personages. Some appertain to work-houses and hospitals ; whilst in a large majority, all interior services are performed by "frères" and "sœurs" of different religious corporations ; scarcely one-third having ordinary, or laical attendants. Again, about half are administered by, or under the authority of various directing Boards of civil hospitals ; whereas, only one establishment—namely, the asylum for male lunatics at Froidmont, near Tournay—belongs directly to Government ; who have delegated the management to a special commission. At present, this small receptacle is capable of containing from 76 to 80 patients, all being of the male sex. However, as it is proposed to expend upwards of 80,000 francs towards improving and enlarging its accommodation, very soon sufficient space will be

supplied for receiving 150 demented inmates within this governmental institution.

Respecting the dietary of insane patients—always so important an item in their treatment—it may be here observed that, the minimum allowance for adults in Belgian asylums should never be less than $32\frac{1}{6}$ ounces of raw meat, $96\frac{1}{2}$ ounces of bread, 13 ounces of butter, with $10\frac{1}{2}$ pints of beer per week. These quantities may, however, be diminished by one-sixth, in the cases of women and young persons under fifteen years of age; whilst the regimen during fast-days, and for sick persons, must be regulated by the authorities of individual establishments, according to special regulations. The above quantities constitute but meagre fare, truly, for grown-up human beings, and scarcely seem sufficient. Nevertheless, the scale is much above what it often was in former years, when competition prevailed amongst different speculating parties; who then farmed out, contracted for, or traded in lunacy. At that period, many lunatics were almost starved, as the feeding of these unfortunate victims was often reduced, by hard-hearted speculators, to the very lowest limit likely to maintain vital existence. Indeed, it is said, some were even fed exclusively upon rye bread and sour milk! During the last two years, the Belgian labouring poor have suffered great privations, in consequence of the scarcity of food: hence, admissions into asylums were much more numerous than previously. Therefore, knowing mental disease originates frequently through want and misery, such contingencies, however common, could be easily explained by the sufferers' insufficient nutriment and physical degeneration.

Small as the amount of animal food just specified may appear, it should be still remembered that the quantity is all consumed during five days of the week; seeing every Friday and Saturday are "*jours maigres*," when a portion of fish or a few mussels are distributed. Should these articles happen to be dear and scarce, then eggs or some equivalent become substituted. Notwithstanding such additions, besides occasionally potatoes, there cannot be any question that too much bread is usually eaten, while the proportion of animalized matter is very inadequate. The regimen in lunatic asylums seems, however, much more nutritious than inmates there confined often previously enjoyed; among whom many, through living almost constantly on vegetable diet, had become debilitated in body, pale and of a yellowish countenance. Hence, while their spirit is thus weighed down, or broken by mental and bodily sufferings, these influences lead to, or facilitate, attacks of insanity in various instances.

That this picture is not overdrawn, might be conclusively proved by numerous yet apt illustrations; although two need only be now quoted, since they appear conclusive. In one of the largest

prisons of Belgium—recently containing upwards of 1500 male inmates—a high official authority told me that not more than 300 were fit for military service. This statement seems the more remarkable, seeing most prisoners usually attain improved bodily health after confinement in these well-managed State receptacles. Another friend—a physician of much experience, and formerly in the military service, but now medical inspector of conscripts for a large district—stated also, in proof of the present deteriorated bodily condition, both of the urban and country population in Belgium, that within the last very few years, he had actually rejected upwards of 7000 young men—drawn for military duty, in consequence of their physical incapacity or degeneration; whilst the proportion he admitted as fit ranged much lower than in any previous similar period, according to his experience. These statements deserve serious attention by Government.

Such facts speak volumes; and even casual observers travelling in Belgium, need only make use of their eyes, when visiting large congregations of people assembled in workshops, and various public establishments belonging to towns, or many humble dwellings of the rural populations, to feel convinced respecting the truth of analogous conclusions. Poorness of diet, prevalence of scrofula—often a consequence of the former—with mental sufferings, from misery and bodily privations, always have a marked disastrous influence in producing insanity. Consequently, it cannot be considered surprising, if psychal maladies are said to have become recently more numerous. Towards which result—as admitted in the Commissioners' late Report—an education that developes the passions, and engenders artificial wants, besides commercial or industrial crises, wrecked fortunes, sensual life, as also disordered habits, have all materially contributed; irrespective of even causing other baneful consequences.

Admitting unequivocally the importance of various improvements, lately made in different Belgian institutions, one department still imperiously demands organic changes—namely, the medical staff of these establishments. No public asylum yet possesses a resident physician or surgeon; and in many, the remuneration is utterly inadequate for the important services rendered. Nay, at some the salary is so insignificant, that the office may be almost considered gratuitous, since the annual pay occasionally does not exceed 200 francs! That is most pitiful parsimony. Therefore, it is no wonder if professional attendance, at such institutions, is thus considered of very secondary importance. Indeed, it has been observed, with reference to establishments so constituted, that the patients being thus abandoned to the sole efforts of nature are rarely cured, and thereby often become a permanent charge to their respective communes.

Receiving such inadequate remuneration, there consequently exists very small encouragement for professional men dedicating their time, chiefly, to the study of mental diseases. Hence, very few psychological physicians are found in Belgium ; while the medical officers of many asylums, being ordinary practitioners, visit these receptacles much the same as if attached to ordinary civil hospitals, and often take little or no part in the direction of the institution, properly speaking. At most insane establishments, that duty is usually left to laical or religious directors, by whom the medical attendant is frequently considered as only an appendage, not the chief moving power—which he ought to be invariably—in everything connected with the moral, physical, and medical treatment of lunatics. This truly injurious system requires immediate alteration. A resident physician ought always to be appointed at every large asylum, possessing paramount authority in his own department. He should, besides, be amply remunerated, so as to secure talent and experience. To do otherwise, is very false economy. Therefore, instead of spending money lavishly in bricks and mortar, to make future new buildings assume palatial imposing forms—which cannot so cure madness, more encouragement should be everywhere given to fully qualified medical men, who only should fill such responsible appointments.

Another feature characterizing several institutions, lately visited, merits criticism and requires amendment. I now allude to the too frequent appointment of religious “frères” or “sœurs” in lunatic asylums, and hence the exclusion of lay persons from various employments. For superintendents in particular departments, as teachers, task-masters, and in several other capacities, such parties are generally admirable assistants to the superior authorities ; whilst the devotion, especially of sœurs to their frequently irksome duties, is often most exemplary. But having likewise, according to the rules of their respective orders—with which they are classed—to perform many ceremonial and religious offices—both early and late, besides even during night-time—much of their attention is thereby withdrawn from the inmates, upon whom they ought then to have been in attendance. To exemplify the effects of these obligations, a simple fact may be here given, as an illustration. At one institution inspected, where the whole attendants—upwards of twenty—were cassocked “frères,” suddenly many we saw occupied with patients disappeared from the court-yards—then perambulated—but whom I afterwards recognised in the chapel at their devotions, amounting to fifteen in number ; but wholly without any audience ! During the period thus occupied—although not more than twelve or fifteen minutes—very few frères were noticed elsewhere. In reality, the patients seemed left almost entirely alone, and thus to take care of themselves. As similar movements, how-

ever, recur from six to eight times during every twenty-four hours, —even throughout the night,—both winter and summer, these duties assume a very serious aspect, with reference to the accumulated time dedicated to such services, which are therefore not employed for the insane residents' immediate benefit, however otherwise to these performers themselves.

Mooting such questions certainly touches tender and debateable ground, especially in reference to Catholic countries and practices. Still, being particularly struck on witnessing similar proceedings, in more than one establishment, and conscientiously believing they entirely concerned the religious brothers so engaged, not the victims of madness under treatment—I am now led to notice the subject, thinking many ceremonies then performed, in whatever way or aspect they may be appreciated by various parties, seemed misplaced in a lunatic asylum, and even subversive of its regular discipline.

Equally strong objections cannot be urged respecting the *sœurs de charité* placed in female institutions. However, even then, the time of such attendants is often too much occupied elsewhere, rather than with patients under their charge. Therefore, it also requires some amendment. Besides which, as both male and female members, of all external religious orders, are affiliated to powers beyond the asylum precincts in which they actually reside, and whose superior behests they must obey implicitly, such an *imperium in imperio* is, I think, by no means desirable. When resident medical officers, possessing dictatorial powers, shall be attached to all public lunatic asylums, and especially those under the absolute control of Government lay commissioners, doubtless the strong objection now specified to the present system will then be materially modified ; perhaps altogether removed.

Nevertheless, without discussing any further the above, and one or two minor questions, but upon which hypercritics might animadvert, every impartial person must admit that Belgium has at present zealously entered on the path of progress and improvement. When the new asylum at Ghent is completed, besides other analogous institutions, which must soon follow so good an example, and while men like Guislain and Ducpetiaux direct public opinion, there cannot remain any doubt that the contrast which this country will exhibit in a few years, compared with no very long bygone period, must be altogether different from its former condition, in reference to lunatics. Consequently, it may be fairly anticipated that various ameliorations which have recently been accomplished in France, and throughout the British dominions, will have soon numerous imitators while adopting modern improvements.

Having now attempted to sketch briefly, in previous pages, the chief observations made during my recent visit to the lunatic asylums of Belgium, I must here bring these Notes to a conclu-

sion. Nevertheless, prior to doing so, a most pleasing duty still remains for fulfilment—namely, to offer the narrator's best thanks to numerous gentlemen with whom he came in contact, during his late excursion, for the kindness and uniform civility everywhere experienced. This is really no unmeaning expression. On the contrary, it enunciates what was then deeply felt, and will long be retained in grateful remembrance. To MM. Guislain, Ducpetiaux, Van Hecke, Bulkens, and last, but not least, to Dr. Parigot—now resident in Brussels, his best thanks are especially due, for the pleasure experienced in their society, as likewise the very valuable information he then obtained. Truly, without such advantages, many previous remarks, which now appear in the pages of the *Psychological Journal*, must have otherwise proved both barren and uninteresting; perhaps, never been narrated.

To the Minister of Justice, his Excellency M. Nothomb, I would further presume also to tender very sincere obligations, for his great courtesy in giving me a special letter of introduction, with which I became honoured; whereby, every facility was afforded to visit asylums, prisons, and other public institutions—as that missive stated, “dans tous les détails”—or in reference to any point I might then desire to investigate, and thereby procure authentic information. Furnished with the above authority—a real “Open, Sesame”—and being also supplied with a “Carte de route,” most kindly traced by M. Ducpetiaux, who, besides being a Commissioner in Lunacy, is also Inspector-General of Prisons, I thus was most politely received at every establishment; while many doors and documents were readily opened whenever desired.

Notwithstanding the subject may seem, perhaps, rather irrelevant to the questions discussed in previous pages, I would observe, in concluding my narrative, that however inferior most Belgian lunatic asylums may really appear, in various important phases, when contrasted with many throughout France and England, still, in regard to prisons, as also reformatory institutions for juvenile delinquents, or adult criminals, Belgium need not fear any comparison; nay, in several respects, there is even some superiority. Philanthropists, or persons taking an interest in the punishment and reformation of criminals, should therefore visit the “Maisons de Force” at Ghent and Vilvorde; the Penitentiaries of Liege and Charleroi; the reformatory prisons of St. Bernard for males, near Antwerp, and that in Namur for females, since each will amply repay minute inspection. But no institutions, in my opinion, deserve notice more than the Government colony at Berneem, which contained 372 girls on the day of my visit; and especially that also in the vicinity, called Russeylede—having 430 boys and lads under its roof. Each are admirably conducted, and confer much benefit on the young population they contained. Apparently, the latter

reformatory even surpassed Mettray, in France, which I have likewise seen, although now some years ago; as also various similar juvenile establishments noticed elsewhere. These two interesting localities being within twelve miles of Bruges, and to which the Ghent Railway conveys passengers more than half the distance, either are, consequently, of easy access. Hence, a journey thither becomes an agreeable promenade, which may be accomplished without difficulty; and assuredly, it will amply repay any trouble, by whomsoever undertaken. Both institutions confer great credit on the Belgian Government, and especially upon King Leopold, who takes an especial interest in their prosperity. Indeed, his Majesty had only recently visited each to see personally how they were managed; when this condescension, of course, gave much satisfaction to every one concerned, and all appeared highly pleased with the royal patronage they so well deserved.

ART. III.—CAPITAL PUNISHMENT FOR MURDER SCRIPTURALLY CONSIDERED.

BY THE REV. J. F. DENHAM, M.A., F.R.S., ETC.

WE believe that there is a great and increasing repugnance to the infliction of the extreme penalty of the law, even in the case of murder, among intelligent and reflecting members of the community. The considerate observer of passing events remarks, that so far from that penalty seeming to act as a prevention of the crime, it is common to find unusually numerous instances of it occurring even during the trial or just after the execution of some homicide whose enormous or repeated guilt, and whose dreadful fate, are fully known to the entire population. The *psychologist* suspects that there is something dangerously suggestive of the act of murder (or, at least, promotive of indifference to human life) in every public execution for it; and, not only as actually witnessed, but as even read of, in the minute details of the scene furnished by the newspapers, &c.; he accordingly receives with dismay the information certified by the *Times*, October 23rd, 1856, that "there were sold of the last dying speech, confession, and behaviour of Good, 1,650,000 copies; of Courvoisier, 1,666,000; of the Mannings, 2,000,000; of Rush, 2,500,000; of Greenacre, 2,666,000; and that the trash sold with reference to Palmer's case must have greatly exceeded any of the above sales." The student in moral and political science, whom we will take to be represented by Paley,* lays down the principle that "the proper end of human punishment is not the satisfaction of justice, but the prevention of crimes—meaning

* Moral and Political Philosophy. Book VI. c. ix. Of Crimes and Punishments.

by the satisfaction of justice the retribution of so much pain for so much guilt ; which is the dispensation we expect at the hand of God, and which we are accustomed to consider as the order of things that perfect justice dictates or requires. In what sense, or whether with truth in any sense, justice may be said to demand the punishment of offenders, he does not inquire ; but he asserts that this *demand* is not the motive or occasion of human punishments. The fear lest the escape of the criminal should encourage him, or others by his example, to repeat the same crime, or to commit different crimes, is the sole consideration which authorises the infliction of punishment by human laws. Now, that, whatever it be, which is the cause and end of the punishment ought, undoubtedly, to regulate the measure of its severity. But this cause appears to be founded, not in the guilt of the offender, but in the necessity of preventing the repetition of the offence. The crimes must be prevented by some means or other ; and, consequently, whatever means appear necessary to this end, whether they be proportionable to the guilt of the criminal or not, are adopted rightly, because they are adopted upon the principle which *alone* justifies the infliction of punishment at all. From the same consideration it also follows, that punishment ought not to be employed, much less rendered severe, when the crime can be prevented by any other means. Punishment is an evil to which the magistrate resorts only from its being necessary to the prevention of a greater. This necessity does not exist when the end may be attained, that is, when the public may be defended from the effects of the crime, by any other expedient. The right of punishment results from the necessity of preventing the crime." It follows, consequently, from the principles of moral and political philosophy, that if capital punishment for murder fails as a preventive of the crime, it ought to be abolished, and some more effectual preventive be substituted for it ; and that certain popular modes of thinking and speaking are inadmissible, derived from the principle of *retaliation*, such as " the satisfaction of a natural instinct," " public indignation," against the offender and his offence, &c. *The social economist* doubts the expediency of capital punishment for murder, upon observing the conduct, language, &c., of by far the greatest proportion of persons assembled to witness the spectacle, evidently attracted thither only for the sake of gratifying certain pernicious emotions ; and arguing from even his own consciousness, he doubts the possible beneficial connexion between a remote, transient, and exciting scene, and the dispositions and principles of any man about to commit murder. *The respectable provincial citizen* deplores the desecration of public decency and tranquillity occasioned in every county town by the

invariable collection of the dissolute and abandoned from all quarters, around the gallows. *The London tradesman or manufacturer* is disgusted, and his affairs are frequently deranged by the irrepressible desire of his apprentices and workmen to go to "hang fair," as an "execution morning" has been called, for many years at least, among certain working classes of the metropolis. He hears with regret of boys from parochial schools and other children, and even female children, forming a portion of "the crowd," and of some of them being elevated on the shoulders of adult spectators to witness the fall of the criminal.* *Religious persons*, of various communions, lament the degradation inflicted on our common nature by the public destruction of human life by the hangman. *All right-minded persons* would confess, we presume, that could capital punishment for murder be *legitimately* abandoned, great relief would be afforded to their feelings, which, though not now, as in past years, harrowed up by reading or hearing of the bi-weekly execution of several fellow-creatures at a time for forging a twenty-shilling note, or for purloining to that amount from a dwelling-house, or for stealing a sheep, or a horse, or for some other of the 159 offences besides murder, formerly declared, by the statutes, to be capital,† are still shocked at intervals by hearing or reading of the public extinction of the convicted murderer's life. But persons belonging to the foregoing classes are generally overawed by the well-known precept delivered by God to Noah and his sons just after the deluge, "Whoso sheddeth man's blood, by man shall his blood be shed: for in the image of God made he man."‡ This precept, or rather the popular interpretation of it is, we believe, the chief obstacle to the abolition of capital punishment for murder. Accordingly it is sometimes urged by religious persons in respectable society, &c., that if capital punishment for murder were to be discontinued the word of God would be disobeyed, and the nation at large would set itself in direct and wilful opposition to a plain command of revelation. This passage is even quoted by Blackstone in his *Commentaries*, as the Scriptural command for putting the murderer to death. No one goes to the Levitical law for a command to this effect, because all persons are aware of the inconsistency of "picking and choosing" from that law, and that a full compliance with it would necessitate the introduction of some new modes of capital punishment

* The well-known appetite of the lower orders for "the horrible and awful" was last year pandered to most effectually by the *histrionic representation* of Palmer's execution, in effigy, "in the same clothes," with "the face taken from a cast," and enacted by "the same hangman from Dudley," got up by a publican in his grounds, in Staffordshire, for the amusement of his customers, twice a day, at sixpence each.
—*Globe Newspaper*.

† Ruffhead's Index to the Statutes (tit. Felony), and the acts since made.

‡ Genesis ix. 6.

among us, or revive the use of others long ago discontinued. No one, we presume, wishes to see "stoning" introduced, or "burning" restored. All persons, we believe, would revolt from the infliction of death on the man who should gather sticks on the Sabbath,* or, that should curse or smite his father or his mother,† or on the adulterer or adulteress,‡ the worshipper of false gods,§ on the manstealer,|| and for numerous other offences, not now capital in this country. Nor can any other than an inferential, indirect and defective argument for capital punishment, even in the case of murder, be derived from Christianity,¶ which in its original constitution as represented in the New Testament "is not a kingdom of this world," and at its first propagation did not, for reasons derived from its circumstances as well as its constitution, interfere with the legal code of heathen nations, but wisely, if not necessarily, enjoined only on its disciples to be subject to the existing higher powers; but yet most certainly does not forbid Christian legislators and subjects in Christian countries to endeavour to assimilate the public laws to the rational and humane genius of their religion.

That one precept then, given by God to Noah and his sons, when they "went forth of the Ark," is commonly supposed to contain the entire Scriptural authority and command for the infliction of death upon the murderer by Christian nations at the present hour. "It is," said the *John Bull* newspaper last year, "the *only* and *all-sufficient answer* to the various fallacies put forth by those who would expunge capital punishment from our penal code." We presume, however, that no dispassioned person would object to consider any reasoning that might be offered with a view to ascertain the real import and proper application

* Num. xv. 32.

† Lev. xx. 9.; Ex. xxi. 15.

‡ Lev. xx. 10.

§ Deut. xiii. 6, &c.

|| Ex. xxi. 16.

¶ Thus, because St. Paul enjoins on the Roman and foreign Christians living under the pagan empire, in the time of Nero, "to be subject unto the higher powers," and remarks, "if thou do that which is evil, be afraid, for he beareth not the sword in vain;" and because it is also *taken for granted* that "the sword" here means the power of life and death, it is *inferred* that the apostle sanctions capital punishment as a *principle*. But he partly explains his meaning by simply saying "a revenger to execute wrath upon him that doeth evil." It should also be remembered, that all crimes against the ancient Roman power were not capital. This inferential argument would, however, in all fairness lead to the conclusion that all the crimes that *were* so punished by the Roman power should be similarly punished in Christian England; and that not the sceptre but the sword should accordingly be the emblem of British monarchy. The sword, *pugio*, as worn by Roman emperors, was simply the emblem of imperial power *in general*; adopted, naturally, by a military nation. Nor does St. Paul represent the Roman "power" merely as an executioner, but as "the minister of God for the good of the people." No authority for capital punishment can be inferred, therefore, from this symbol, any more than from the sword carried at this day before our chief civic authorities, &c. Nor should the distinction pointed out by Paley be overlooked, that "what St. Paul designates 'the ordinance of God' is, without any real repugnancy, by St. Peter denominated '*the ordinance of man*.'"

of that precept; because there is absolutely no other mode whereby the true sense and proper use of any passage of Scripture whatever can be ascertained; nor is there any medium between the willingness to investigate the meaning and intention of any portion of Holy Writ with candour and patience, and a blind superstition that is liable to be misled by the sound of words into any possible absurdity of belief and conduct. We now then invite the careful and unbiassed attention of the reader to some observations sanctioned, as will be seen, by *eminent Biblical scholars*, upon the precept in question, and respecting the obligation it is commonly considered to impose absolutely, on Christian legislators to put the murderer to death. First. Our attention will be directed to the words of the precept, which, with its context, reads as follows:—"And surely your blood of your lives will I require; at the hand of every beast, or rather *soul*,* will I require it, and at the hand of man; at the hand of every man's brother will I require the life of man." Then comes the recapitulation of the subject previously enunciated, so frequent in the book of Genesis—"Whoso sheddeth man's blood, by man shall his blood be shed; for in the image of God made he man."†

Now there is, we think, something that must strike every attentive reader of even the English version of this passage, as remarkable in the introduction into it of the word *brother*; "at the hand of every man's *brother* will I require the life of man"—literally, and at the hand of *the* man, at the hand of a man his brother will I require the life of man. Dr. Boothroyd translates—"from every man's own brother will I demand an account of the life of man."‡ Dr. Geddes—"from a man's own brother."§ The Samaritan copy and eight manuscripts, as also the Syriac and Vulgate all read—of a man and of his brother. "The common Greek text," as Dr. Geddes observes, "is corrupted and unintelligible; nor do the manuscripts afford anything like a decent correction. The comma is admirably well rendered by the Greek of Venice *προς χειρος ανδρος του αδελφου αυτου*," literally—from or by the hand of a man and his brother, or of a man the brother of him. Now we cannot allow ourselves to depart from the letter of this divine enactment; and we, therefore, reject the interpretation which would generalize this word "brother" into the

* "According to tradition the first part of this text prohibits suicide, and the second half homicide. Where no adjunct is coupled with *נפשו*, that word invariably relates to the *soul of man*. The rule holds good here. Hence then we have the satisfaction to find in the Sacred Scriptures this early and perfect indication of a punishment to the soul after death, and the necessary *sequitur*—its immortality." New Translation, by the Rev. D. A. De Sola, and the Rev. Morris J. Raphall. Vol. I. pp. 34, 52. London. 1844.

† Genesis, ix. 5, 6.

‡ Family Bible in loc.

§ Critical Remarks on the Hebrew Scriptures.

sense of "brother man," or would gloss as follows, "though the murderer be as nearly related as a brother, he shall be punished." Nor do we see any assistance given to the interpretation of this precept in the marginal references appended to it in the English version, one of which is to Acts xvii. 26—"God hath made of one blood all nations;" two, consist of predictions, that "they that take the sword shall perish with the sword" (Matt. xxvi. 52). "He that killeth with the sword must be killed with the sword" (Rev. xiii. 10); and the rest are to the incorporation of the precept in the Levitical law. We adhere strictly to the terms of the enactment, and we plead that such an adherence is essential to the legitimate and safe use of all enactments, human and divine. We are, indeed, willing to allow that the word here translated brother includes kinsmen of various degrees of consanguinity (comp. Gen. xiii. 8 **אָנְשִׁים אַחִים**), clansmen (1 Chron. vi. 39, &c.); but we say that this precept delegates the infliction of death upon the murderer, either by the hand of the "brother" literally, or by some other nearest kinsman of the murdered man. In short, we believe the import of the precept to be conveyed in the literal sense of it, and that it contains the appointment of "the ancient and universal law of BLOOD REVENGE," called by the Hebrews **גּוֹל הָרֵם** *goel-hadam*; whereby, as Jahn observes on this precept, "the punishment of homicide devolved on the brother or other nearest relation of the person whose life had been taken away. In case he did not slay the guilty he was considered infamous. Hence the application of the Hebrew *Goel*—i. e., spotted or contaminated, which he bore till the murder was revenged." He adds. "To change a law, however, or practice of long standing, is a matter of no little difficulty. Moses, therefore, left it as he found it; but he endeavoured, nevertheless, to prevent its abuses by the appointment of cities of refuge (Num. xxxv. 9—29; Deut. xix. 6; and Josh. xx. 3), to one of which all persons who had been the cause of death to another might flee and be protected until the case was investigated; and if found, according to the laws, guilty of homicide, the manslayer was delivered up to the avenger of blood, who was always supposed to be both prosecutor and executioner."*

Secondly. We now pause for a time to remind the reader of the universal prevalence of this law of Blood revenge in the earliest times, and among most eastern nations down to the present hour. The action of this law is first met with in the history of Abraham, where Esau, having been overheard purposing to kill Jacob his brother, Rebekah sent Jacob away to Haran, saying—"Why should I be deprived of you both in one

* Archæol. II. ii. 372 ff.

day," plainly intimating that the next of kin, which, in this case, would have been the eldest son of Ishmael, would have been bound to kill Esau, had he effected his purpose. This law appears again in the fiction practised upon David by the woman of Tekoah, where, however, it was overruled in her favour by the dictum of the king (2 Sam. xiv. 2, &c). Josephus relates the continuance of it among the inhabitants of Trachonitis.* Goguet thus describes its prevalence among the ancient Greeks :—"They had no public officer charged to look after murderers. The relations of the deceased alone had the right to pursue revenge. Homer shows it clearly (*Il.* 9, lin. 628, &c). We may add to the testimony of this poet that of Pausanias, who speaks in many places of this ancient usage (lib. v. c. 1, p. 376; lib. viii. c. 34, p. 669); an usage that appears to have always subsisted in Greece. (See Plat. *de Leg.* l. 9, p. 930, 931, and 933. Demosth. *in Aristocrat.* p. 736. Pollux, lib. viii. c. 10, segm. 118)."† Mahomet, like Moses, did not abolish, but modify the law of Blood-revenge, by allowing of the acceptance of money for the forfeited life of the murderer, and at the worst by forbidding the infliction of any painful or cruel death.‡ It exists to this day among the Arabs, the peasantry of Egypt,§ the Persians, Abyssinians, Druses, Circassians, and Tartars.|| In Corsica and Sardinia this law is still in action, and known by the name of *vendetta traversa*, or mutual vengeance, having withstood all the efforts of the celebrated General Paoli to eradicate it. It is executed by even females.¶ "The law of *Thar*, or blood avenging," says Kitto, "existed from the earliest ages, and still by its action upon the fears of the wild tribes of the desert, and indeed of all the less civilized tribes of Western Asia; from the shores of the Red Sea to the Caucasian mountains, keeps in check their fiercer passions, and makes them backward to shed blood. By this law, the nearest relation of the slain party is bound to pursue the slayer, and to rest not—never to let his purpose sleep—till he has exacted life for life, and blood for blood." Now, this early and extensive prevalence of the law of blood revenge, is only explicable by the interpretation we have given of the precept to Noah and his sons, or rather by the literal rendering of that precept. The various gentile nations could only have thus pervasively derived it from some common origin of it; and no other such origin is assignable, except in the renewal of the

* Ant. iv. 7, 4.

† Origin of Laws, &c. Part II. Book I. Art. viii. Vol. ii. p. 71. Edinburgh.

‡ Koran, c. ii. iv. v. 17. 22. Sale's "Preliminary Discourse." Sec. 6.

§ Lane's "Modern Egyptians," c. iii.

|| Winer's "Biblisches Realw. Art. Bluträcher."

¶ Simonot's "Lettres sur la Corse." p. 314.

human race in the Noachidæ—and the subsequent dispersion of their descendants, according to their families, to all parts of the earth at the Tower of Babel—and we consider the high antiquity and universality of this law to be perfectly confirmatory of our interpretation of the precept. As given “to Noah and his sons,” it might have originated partly in the intention of God to express his regard of human life—notwithstanding the late immense destruction of it by the deluge : or it might have been called forth by the “violence” that had “filled the earth” in the anarchical and depraved state of mankind for some ages anterior to the deluge. Many commentators remark that the precept was suited to an infantine state of society, in all respects. It might have been well adapted then, as it is even now, in imperfect states of society, to prevent bloodshed, by committing the revenge of it to the next of kin ; but in proportion as mankind became more numerous, and society more humanized and rational, the execution of this ancient law would be liable to many inconveniences—as is still the case where it prevails—calling for some such regulations and adjustment of it as were made by Moses and Mahomet ; but that it was merely a *positive* precept, an especial enactment arising out of circumstances, like the law of quarantine, or laws of excise, or particular taxes, and not a *moral* law, or a law founded upon the moral nature of actions and the propriety of relations, and *therefore unalterable*, will be shown subsequently in our observations upon the divine procedure in the case of Cain.

Thirdly. If, indeed, any authority for capital punishment in the case of murder is derivable from this precept, it can only in fairness be taken from the later and improved form of it prescribed by the Levitical law ; but, as already observed, such a derivation would, in all fairness, involve the adoption of the whole of that law ; and it may be remarked, that the adoption of this particular part of it, with all its adjuncts, would be impracticable in this age and country. This part of the Levitical law was doubtless well adapted to the circumstances of the Jews when they received it, who were then a merely nomadic people—a nation of recently emancipated slaves, to whom a reformatory discipline would have been inconvenient, and who, as many of the enactments of that law clearly show, were not elevated in morals above their late heathen masters, the Egyptians, or their heathen neighbours while in the wilderness, and who were peculiarly intractable ; and both then and during some later ages were placed under what Josephus terms a theocracy,* and could instantly consult the supreme lawgiver as to the propriety of inflicting death in any particular instance ; and which lawgiver

* Contr. Apion. Book II. c. xvii.

himself was ever supposed to be present at the execution of the sentence. Nor can we forget that the Levitical law was pronounced imperfect, at least in one point, by the Saviour himself—namely, in regard of the provision it made for divorces, of which point, he says, “Moses suffered,” or allowed it, “because of the hardness of your hearts;” and it is most worthy of notice that our Lord corrects that enactment by an argument taken from the state of things, “*when God made man,*” and “*at the beginning.*”^{*} It is also remarkable that no enactment against suicide occurs in the Levitical code, although, as we have already seen, it was probably forbidden in the precept delivered to Noah.

Fourthly. It is, however, sometimes urged that *because the reason of the precept given to Noah is general*—namely, “for in the image of God made he man”—therefore the punishment of the murderer with death ought also to be general, since every man that is now murdered was “made in the image of God.” Now, we might with perfect satisfaction to ourselves reply to this argument by simply protesting, along with Michaelis, against inferential laws derived from the ancient laws of the Scriptures. We well know the dangers attending such an arbitrary exercise of human judgment on the divine statutes. We give, as an illustration of that danger, the following comment, on the precept in question, by the venerable Bp. Patrick:—“*By parity of reason,* what was ordained against murder was to be executed against other great offences; there being some things which are no less dear to us than life, as virginal chastity and matrimonial fidelity, &c.” This “parity of reason” will, of course, seem more or less clear, and more or less extensive to different minds, and, consequently, punishments based upon such an inferential interpretation might extend, especially if various minds were consulted, to an amount, all included within the Bishop’s *et cetera*, that would exceed the demands of the most Draconian legislators of modern ages. But, waiving for a moment, both our protest and all that has been already advanced respecting this precept, it may be remarked, in passing on to our more conclusive reply to the inferential use of “the reason for this precept,” that some dubiety hangs about the genuine reading, if not even about the genuineness of this part of the precept itself. In the inverted form, “for in the image of God made he man,” in which that “reason” appears stated in the English version and in the printed Hebrew text and copies, it looks like a quotation from Gen. i. 27, “So God created man in his own image.” But we can hardly conceive of *God* speaking of *himself* in this manner. And it would seem that there is something dubious about this part of the text, since the Septuagint renders the words *ἐν εἰκόνι*

^{*} Compare Matt. xix. 3, 7, with Deut. xxiv. 1.

θεου εποιησα τον ανθρωπον—because in the image of God I have made man—which, nevertheless, is scarcely suitable to the occasion in which God himself is the speaker. It is still more remarkable that *this* “reason” is not repeated in Leviticus, but that the reason there given for inflicting death upon the murderer is, that the *land* (of the Jews) should not be defiled, and that the land could only be cleansed from “blood by blood.”* We will also decline taking any advantage of the dubiety of the Hebrew particle rendered—“for in the image”—in this passage, which has sometimes, at least, the sense of *although*. Nor will we resort to any other of the seven different versions which the words in question have received,† nor attempt to convert them into a prediction; but granting, as Schulz does, the genuineness of the common Hebrew text of this passage, and accepting the English version of it as correct, we urge that the reason here given for the infliction of death on the murderer is simply of a *positive* nature, and, as already observed, it is simply what it seemed good to infinite wisdom and goodness to assign at a particular time, and with a view to a particular effect, and not founded on moral and therefore immutable reasons: and our argument for this view of that “reason” is taken, as heretofore intimated, from the well-known procedure of the Almighty in the case of Cain. For,

Fifthly. “If ever there was a murder,” to use the language of modern journalists, “committed by a man in a state of perfect sanity, and with *malice prepense*,” it was that committed by the first fratricide. Envy and wrath, arising from the most exceptionable causes, and guiltily unsuppressed, are stated by the Scriptures to have been the causes of the bloody deed. “Cain slew his brother, because his own works were evil and his brother’s righteous.” “Cain was very wroth, and his countenance fell, because unto Cain and his offering the Lord had not respect; but the Lord had respect unto Abel and his offering.”‡ “Perfect deliberation attended the act of unnatural violence,” for, according to the reading of the Septuagint, Syriac, Vulgate, and both Targums, a reading pronounced by Dr. Kennicot to be “undoubtedly genuine,” although it has entirely slipped out of the present Hebrew text, “Cain said to his brother Abel, let us go forth unto the field.” And then, as the English version properly proceeds to read, “it came to pass, when they were in the field, that Cain rose up against Abel his brother and slew him.” *But what was the punishment inflicted on Cain?* Instead of being put to death by the

* Numbers, xxxv. 33.

† See Leone Levi’s “Law of Nature and Nations.” Note.

‡ 1 John iii. 12. Genesis iv. 4, 5, &c.

immediate hand of God, or even by Abel's brother, son, or other next of kin, or by any other human being, "because in the image of God made he man," Cain was simply condemned by the Almighty to disappointment in agriculture, and to be a fugitive and a vagabond in the earth. "The Lord said unto Cain, What hast thou done? The voice of thy brother's blood crieth unto me from the ground. And now thou art cursed from the earth, which hath opened her mouth to receive thy brother's blood from thy hand. When thou tillest the ground, it shall not henceforth yield unto thee her strength—a fugitive and a vagabond shalt thou be in the earth." And when Cain complained of the severity of his sentence, saying, "My punishment is greater than I can bear. Behold thou hast driven me out this day from the face of the earth (land), and from thy face shall I be hid; and I shall be a fugitive and a vagabond in the earth—and it shall come to pass, that every one that findeth me shall slay me. The Lord said unto him, Therefore, *whosoever* slayeth Cain, vengeance shall be taken of him sevenfold. And the Lord set a mark upon Cain"—or, rather, appointed him a sign, that is, some miraculous token—"lest any finding him should kill him." Now we maintain, that had the punishment of death, for even a wilful, premeditated, and deliberate murder been founded in *moral* law—that is, in those abstract relations arising from the nature of things, and in the distinctions of moral right and wrong, which, along with all sound authors, we hold to be not the dictates of the mere or sovereign will of the Deity—either the Almighty himself, whose own "everlasting righteousness" consists in his invariable adherence to those moral distinctions, and upon whose inflexible adherence to them all the confidence, all the hopes, and all the fears of his rational creatures are entirely, and will for ever be founded—would either have himself inflicted death upon Cain, or would have required "the blood" of Abel, at the hand of some human being, by requiring him to inflict death upon the fratricide. But since Cain was not put to death by the first of these means, and was actually preserved by a miraculous interposition of God from death by the second of these means, we infer, with entire confidence, that the "reason" of the precept given to Noah, namely, "for in the image of God made he man," is not founded on moral and immutable grounds; that consequently, the precept itself, as well as the reason for it there assigned, are simply of the nature called *positive*, and therefore, and in the absence of any declaration of Scripture to the effect, *not* binding upon the whole human race in all ages. Accordingly, a judicious commentator* is actually driven into the following explanation of the case of

* Pyle.

Cain as compared with the precept to Noah. "I so far forgave Cain the first act of murder, as not to punish him by a violent death for it; *yet, for the future, life shall go for life.*"

It cannot be rejoined that there was then no man to kill Cain, for otherwise Cain's dread that any one finding him should slay him, and God's interposition in giving him a sign, *lest* any finding him should slay him, would both have been perfectly futile. It is true that we have no *recorded* account of the existence of more human beings at this period than Adam, Eve, Cain, and Abel—neither is the existence of more human beings denied; but it is plainly implied, in the terms of the narrative. Nor is the age of the two brothers respectively recorded; we may safely conceive of them as being each more than a century old. Mr. Scott observes, "Adam and Eve had many more children than are mentioned in the brief narrative, which was principally intended to record a few important particulars, and to trace the history from the beginning to the time of Moses; and if, as is generally thought, Abel was murdered but a short time before the birth of Seth, the human race might have been greatly increased in the space of 130 years."* Stackhouse remarks, "It has been calculated that, according to the Hebrew chronology, there might have been upwards of 420,000 men alone then living, without reckoning women, or even children under seventeen years old; and, if the Septuagint chronology of Dr. Hales be followed, the number of mankind before the death of Abel might have been much greater."† Abel himself might have been the progenitor of a numerous offspring, and Cain also might have been the father of many more children beside Enoch, after whose "name they called the city which he built, after he went out from the face of the Lord and dwelt in the land of Nod." Assuming then that the human race had become numerous, it would seem certain from the dread of Cain that "*every one* finding him should slay him," that the law of blood revenge, as already described, was unknown at that period. Nor does it seem to have been known in regard of the apparently unintentional homicide by Lamech,"‡ who observes, "If Cain shall be avenged sevenfold, truly Lamech seventy-and-sevenfold." Neither is there any trace of this law before the deluge. Since then the infliction of death on Cain for the murder of Abel was prevented by an especial intervention of the Almighty, we are persuaded that the appointment of that punishment to "Noah and his sons" by the hand of the "brother" or next of kin of the murdered man was a mere positive precept;

* Commentary on Genesis.

† History of the Bible. Edit. Bishop Gleig. London. 1817. p. 114.

‡ Genesis iv. 23.

and since the positive precepts of the Levitical law into which that precept was incorporated are not binding upon Christians, so neither is this precept itself, as modified by that law, binding upon Christians. We apply to this precept our Lord's refutation of the Levitical law of divorce, "From the beginning it was not so;" consequently we believe that neither the precept in question, nor any other portion of Scripture, *necessitates* or *compels, proprio vigore*, Christian nations to punish the murderer with death, and that the abolition of this punishment for murder would not be contrary to the inspired and universally obligatory will of God. We regard this precept as partaking in all respects of the same positive character with its associated precept not to eat blood, with the distinction of clean and unclean beasts in the preceding chapter, polygamy, concubinage, and other ante-levitical and positive, and therefore changeable customs, which Moses either incorporated into his legal code as he found them, or regulated by certain restrictions and distinctions, so as to make them useful under the peculiar circumstances of the Jews—but as having no claim upon the universal adoption of Christian nations, because not re-enacted by divine authority upon such nations. Accordingly, we think that to insist upon the adoption of this precept by Christian nations, and especially along with the rejection of other associated precepts, is an act partaking largely of that fondness for "beggarly elements," against which St. Paul set himself with entire and unwearied opposition.

Sixthly. It may be here permitted to the writer to explain his views of the exact ground taken by the *Church* in regard of the question of capital punishment for murder. He craves this permission, because he has often heard it intimated that the Church affords the chief obstacle to the abolition of that punishment for that crime. Now, the Church certainly teaches, in her Thirty-seventh Article, that "the laws of the realm *may* punish Christian men with death for heinous and grievous offences." It is, however, obvious to remark, that the Article does not specify any particular offences, nor does it say *must* punish with, &c.; it speaks only generally and permissively, and it speaks justly here, in its character as "a witness and keeper of Holy Writ;" but in this case it quotes no passage of Scripture; nor is capital punishment for any crime *forbidden* in Scripture. Certain emergencies are easily conceivable in which "the laws of the realm" would be scripturally justified in taking the life of the grievous and heinous offender, and such an emergency would be any offence that was irrepressible by any other means, or not equally repressible; for, as Bishop Burnet observes on this Article, "the lives of men ought not to be too lightly taken

except as it appears *necessary for the preservation and safety of the society*.* It being clear, then, that the Article of the Church does not *necessitate* the punishment of Christian men with death for murder, and it seeming evident to us that neither do the Scriptures unconditionally demand it, we beg to suggest that the *experiment* might be, on all grounds, safely made, whether any or what other mode of preventing murder would at least be equally effectual with the gallows. At all events, we can scarcely imagine that cases of murder would exceed, while such an experiment was being made, in number and atrocity, those which have been perpetrated in Great Britain during the past year, and many previous years, under the full operation of capital punishment.

Nor shall we shrink from the task of proposing an experimental substitute for that punishment for the crime, although such a task is not strictly required by the foregoing investigation. We recommend, then, the confinement of the convicted murderer for life, as a being who is unqualified for the advantages of society. Treat him in all respects as a convict; exact from him hard labour, if he can endure it; but also afford him moral and religious instruction, that, if he be of sound mind, the agency of conscience and the grace of God may effect his genuine repentance unto that "eternal life which no murderer hath abiding in him."† Nor do we believe that the disposal of murderers by this method would increase their crime. From inquiries we have diligently made, we infer that depraved and desperate minds actually dread condemnation to such a mode of spending the rest of their days, more than they dread a violent death. We are happy to find the following concurrence with these latter views in the work of a celebrated writer:—"It is not the *intensity* of the pain which has the greatest effect on the mind, but its *continuance*; for our sensibility is more easily and more powerfully affected by *weak but repeated* impressions, than by a *violent but momentary* impulse. The death of a criminal is a terrible but momentary impulse, and therefore a less efficacious method of deterring others than the *continued example* of a man deprived of his liberty, and condemned as a beast of burden to repair by his labours the injuries he has done to society. 'If I commit such a crime, says the spectator to himself, I shall be reduced to that miserable condition for the rest of my life!' A much more powerful preventive than the fear of death, which men always behold in distant obscurity. In the contemplation of *continued* suffering, *terror* is the only, or, at least, the permanent sensation.‡"

* Exposition of the Thirty-nine Articles.

† 1 John iii. 15.

‡ Marquis de Beccaria's "Essay on Crimes and Punishments." Edit. 2.

Although we are fully aware that the readers of this journal are not influenced merely by names, yet it may be acceptable to them to find that some divines of the highest eminence, and belonging to various communions, have coincided with our interpretation of the precept given "to Noah and his sons." Nor are we surprised to find some commentators, especially English, interpreting that precept as a universal and perpetual command for putting the murderer to death. Our very few English commentators on the whole Bible, probably viewed this precept under the bias of national prepossessions. Nor are commentators upon the whole Bible, or on any very considerable portion of it, the best referees for the sense of individual portions of Scripture. The vastness of their undertaking does not admit of their scrutinizing particular passages with sufficient pains. Such commentators are generally mere compilers: they follow the beaten track of interpretation, as even Whitby himself ultimately confessed he had done* with regard to his commentary on the New Testament. The opinion of one unbiassed, learned, and investigating divine is worth more than a whole host of adopted, retailed, and conventional interpretations. We proceed to adduce the opinions of the superior class of theologians, in addition to those quoted in the preceding paper. Arnheim gives his opinion that "the precept establishes the *lex talionis*: if one stranger **הָאֵרֶם** slay another, the kinsmen of the murdered man are the avengers of blood; but if he be slain by **אִישׁ אָדָמִי** one of his own kindred, the other kinsmen must not spare the murderer; but should they do so, then Divine Providence will require the blood, *i.e.*, avenge it." Schulz remarks upon the precept—"God is here speaking to men having no magistrates. Hence, he grants to the whole society of men, and to every individual man, the right and power of punishing any homicide, whatever, with death, and at the same time inculcates the use and exercise of this right and given power. The society of men living in a natural state requires it, and it is exercised by all nations where they live in a state of nature without magistrates. But this law, given and inculcated upon men living in a state of society, which readily runs into abuse, *does not reach beyond; neither, therefore, is a positive, universal law to be deduced from this passage.*"† Michaelis remarks upon the application of this precept to "the infancy of society," and "its antiquity long before the time of Moses, who adopted the wise plan of appointing the privilege of asylums, as did most other legislators; thereby taking away, in a great degree, the power to punish the murderer from the Goel, and preventing, what must have often happened, the shedding of innocent blood."‡ Houbi-

* Whitby's "Last Thoughts."

† Scholia in Vet. Test.

‡ Recht Moses.

gant applies the precept to "the law of retaliation, and not to punishment inflicted by the magistrates." Dr. Geddes adopts the same view of it. To these authorities we may add those of Winer and Gesenius. After all, the question must be left to the judgment of the reader, formed upon a consideration of the materials now submitted to it, and directed by the enlightened benevolence, which it is the privilege of a sound understanding to enjoy and exercise under the present advanced state of Christian knowledge, science, reason, and civilization.

ART. IV.—REPORTS OF AMERICAN INSTITUTIONS FOR THE INSANE.*

BY S. PLINY EARLE.

(From the *American Journal of Medical Science*. Edited by Isaac Hays, M.D.)

THE American reader who wishes to obtain a knowledge of insanity, its nature, its causes, and its proper treatment, without personal observation in an hospital, can hardly do better than procure a series of the Reports by Dr. Ray. We always shrink from them when preparing our notices, because of the labour required in the effort to do justice to both the author and our readers, and at the same time confine ourselves within justifiable limits.

	Men.	Women.	Total.
Patients in the Butler Hospital, Dec. 31, 1853.	63	73	136
Admitted in course of the year	31	49	80
Whole number	94	122	216
Discharged, including deaths	40	45	85
Remaining December 31, 1854	54	77	131
Of those discharged, there were cured . . . . .	...	...	40
Died . . . . .	...	...	19

- * 1. Of the Butler Hospital, for 1854.
 2. Of the Bloomingdale Asylum, for 1854.
 3. Of the New York State Lunatic Asylum, for 1854.
 4. Of the New Jersey State Lunatic Hospital, for 1854.
 5. Of the Pennsylvania Hospital for the Insane, for 1854.
 6. Of the Pennsylvania State Lunatic Hospital, for 1854.
 7. Of the Maine Insane Hospital, for the years 1854 and 1855.
 8. Of the New Hampshire Asylum for the Insane, for the years 1854 and 1855.
 9. Of the Vermont Asylum for the Insane, for the years 1854 and 1855.
 10. Of the Massachusetts Lunatic Hospital, Worcester, for the years 1854 and 1855.
 11. Of the Boston Lunatic Asylum, for the year 1852.
 12. Of the New York City Lunatic Asylum, for the years 1854 and 1855.
 13. Of the Maryland Hospital for the Insane, for the years 1853, 1854, and 1855.
 14. Of the Mount Hope Institution, for the years 1854 and 1855.
 15. Of the Western Lunatic Asylum, Virginia, for the years 1854 and 1855.
 16. Of the South Carolina Lunatic Asylum, for the years 1853 and 1855.

The department for females has been so much crowded, that applicants for admission have been rejected.

Patients admitted from 1848 to 1854, both inclusive	663
Discharged, recovered	211
Died	121

The deaths are "equivalent to about 15 per cent. of the *average resident number of patients*,* one year with another."

"In 1850, when dysentery was very prevalent in this region, we had our share of it; but this year we had only a few cases, none of them being severe, and not more than three continuing beyond the third day. With these two exceptions, and that of an occasional influenza, we have been entirely exempt from epidemic disease."

"It is a noteworthy fact, that in most if not all our hospitals the mortality has been steadily increasing of late years." We have made no investigations in regard to that which is here asserted.

"*Premature removals*" is still one burden of complaint in the Reports from many of the institutions. "It is one of the disheartening experiences of our calling," says Dr. Ray, "to be so often obliged to see a patient removed just at the moment when it seemed as if our efforts to promote his recovery were about to be rewarded with success, though a longer perseverance would have been followed by no very obvious deprivations—none, certainly, which a year or two of restored health would not have fully repaired. Few things are more calculated to lower our estimate of human nature than *this balancing of reason, God's greatest gift to man, with a paltry sum of money*. . . Few of our patients who fail to recover within five or six months are allowed to remain longer. It is concluded that everything has been done that we can do, and that the time has come for another experiment. And yet it appears, from one of Esquirol's tables, that in the French hospitals less than one-half of the recoveries occur within the first year. . . I have no hesitation in saying that many of the incurables that form so large a share of the inmates of our hospitals, have been made so by the interference of well-meaning but injudicious friends."

From a very accurate exposition of the *secret*—if secret it may have been—in which lies the superior advantage of *hospital* over *domestic* treatment, we make an extract which will impart a sufficient idea of the whole:—

"Insanity implies the existence of bodily derangement, and therefore is a suitable object of medical treatment, which, of

* We regard this as the only accurate basis upon which to compute the mortality in any public institution.

course, would be more skilfully applied by men who are devoting their whole time and attention to this affection, than by those who observe it only on a very limited scale. But it also implies derangement of the ideas, hallucinations of the senses, perversion of the moral sentiments—all which, though the result of physical disorder, are, so far as their outward manifestations are concerned, in some degree under the control of others, and by such control—in a way not very well understood—the morbid process may be arrested. Now, it is the moral management prevalent in the hospitals of our time which so strongly distinguishes them from those of any former period, and determines, in a great measure, the amount of good which they accomplish. . . . It is one of their merits, indeed, that this management works so easily, and substitutes so quietly its own arrangements for the suggestions of disease, that the uninitiated observer finds it difficult to appreciate its real value, and thus often mistakes the character of its results. He sees the patient taking no medicine, perhaps; calm in his discourse and movements; readily complying with the wishes of others, and engaging, it may be, in some form of work or amusement; and he adopts the conclusion, which no opinion of the physician can shake, that the patient has recovered, or, at any rate, is so much better that he would do equally well at home, or in a private family. He can scarcely be made to believe that what he witnesses is chiefly the result of that special management peculiar to a modern hospital for the insane—of architectural arrangements which restrain without annoyance; of systematic regularity in the daily routine of life; of gentle manners, judicious firmness, vigilant, enlightened, and conscientious supervision. Now, these qualities are not a matter of accident, nor are they the growth of a day. They are the elaborated result of a profound study of the mental constitution, both in health and disease; of extensive inquiry into the various arts concerned in the erection and practical working of an extensive establishment, and of an organization of the service best calculated to effect its designed object.”

“The peculiar restlessness of the insane, which impels them to roam about regardless of time and occasion, at the risk of their own safety and the peace of society, and which finds no sufficient restriction in the arrangements of an ordinary dwelling, short of confinement in a small apartment, is effectually controlled in an hospital; while the range of ample galleries and airing-courts prevents that control from being oppressive and unhealthy. Their fitful humours, their wild caprices, their impulsive movements, their angry looks, are met by the steady and straightforward will of attendants who have learned to per-

form their duty unbiassed by fear or favour. Having no object of their own to serve, imbibing the spirit of kindness which prevails around them, deterred from improper practices by a vigilant supervision, and aided by suitable architectural contrivances, they are enabled to manage their charge with the least possible degree of annoyance. Thus withdrawn from outward excitements, and especially from the persons and scenes connected with his mental disorder, the patient naturally becomes calmer, his mind opens to better suggestions, and finally seeks for repose in amusement or labour. And thus it happens that in many cases but little more is necessary to conduct the morbid process to a successful issue, besides giving the constitution a fair chance to exert its restorative powers unembarrassed by adverse influences."

In the Report of the Bloomingdale Asylum, Dr. Brown gives the following statistics :—

	Men.	Women.	Total.
Patients in the Asylum, January 1, 1854	56	68	124
Admitted in course of the year	58	64	122
Whole number	114	132	246
Discharged, including deaths	64	55	119
Remaining December 31, 1854	50	77	127
Of those discharged, there were cured	22	26	48
Died	16	10	26

Causes of Death.—Old age, 6 ; exhaustive mania, 4 ; phthisis pulmonalis, 3 ; general paralysis, 3 ; epilepsy, 2 ; marasmus, 2 ; apoplexy, 1 ; disease of kidneys, 1 ; suicide, 1 ; use of opium, 1 ; "exhaustion from a suicidal attempt previous to admission," 1.

Of the six who died from old age, the youngest was 70, and one had reached the age of 95, preserving a remarkable degree of intellectual activity and genial humour within a few days of his departure.

"The insane, as a class," remarks Dr. Brown, "are unsound alike in mind and body. They inherit the multifarious varieties of scrofula, and among them abound the Protean forms of nervous diseases, hysteria, chorea, neuralgia, and epilepsy. Some are victims to depraved appetites, unrestrained by an enlightened and vigorous will, and suffer the torments of alcoholic poison, which has paralyzed alike their physical energies and their moral sense. Cardiac, hepatic, renal, and uterine affections are common among them, excite and shape their delusions, and generally shorten their lives. Their sensations being enfeebled or perverted, they disregard extremes of heat and cold, and become indifferent to danger ; but while the mind may betray no indication of pain, their bodies suffer like those of sane men. Neglect of hygienic laws, and resistance to the regimen or habits

imposed by others for their benefit, beget inevitable evils. Obstinate derangements of the digestive and assimilative organs are induced by prolonged abstinence, or excessive and unmasticated food ; the circulation is languid from muscular inactivity ; the extremities are cold and livid ; slight abrasions of the skin become alarming ulcers ; and serious visceral disease insidiously establishes itself, too often successfully resisting medical art. These patients become prematurely old ; their intellectual perceptions and moral emotions disappear with healthy sensation ; they sicken and die, often without an intimation of suffering, or an expression of concern.

“On the other hand, a remarkable exemption from prevailing epidemics is sometimes vouchsafed to these unfortunates. Thus, while cholera prevailed to a considerable extent in the neighbourhood of the Asylum during the past summer (1853), no instance of this disease occurred within our enclosure, and the whole household was preserved, in an unusual degree, from all affections of a similar character.”

The long-desired improvement in the buildings of this institution has at length been accomplished by the enlargement of the “lodges,” and the introduction into them of a system of forced ventilation, and heating by hot water. The beneficial effects of these have soon become apparent. “Quiet and sensitive patients have been effectually relieved of the annoying presence of the disorderly and noisy, and at the same time the latter have been permitted a degree of liberty formerly incompatible with the comfort of their associates.”

In the means for ministering to all the physical comforts of its patients, the Bloomingdale Asylum has now but few equals in this country.

Dr. N. D. Benedict resigned the office of superintendent of the New York State Lunatic Asylum in June, 1854, and was succeeded by Dr. John P. Gray, who for some years had been connected with the institution as assistant physician. The report of the latter contains a large amount of interesting matter, from which we shall extract that which appears to be of the greatest value.

	Men.	Women.	Total.
Patients in the Asylum, November 30, 1853	239	207	446
Admitted in the course of the fiscal year	191	199	390
Whole number	430	406	836
Discharged, including deaths	204	182	386
Remaining November 30, 1854	226	224	450
Of those discharged, there were cured	98	66	164
Died	29	36	65

Causes of Death.—Phthisis pulmonalis 15, exhaustion from

acute or periodic mania 11, exhaustion of chronic mania 5, old age and protracted mental disease 4, general paralysis 4, epilepsy 4, suicide 4, erysipelas 4, apoplexy 2, hemorrhoids 2, disease of liver 1, pneumonia 1, typhoid fever 1, chorea 1, not stated 7.

"In December last (1853), a case of smallpox occurred, which, though isolated as much as possible, was followed by others, and in the two months following we had twenty-three cases. By great precautions, the disease was confined entirely to the male department."

In the spring and summer of 1853, "the domestics engaged in the kitchens were seized with typhoid fever. We attributed this to the decayed state of the floors and timbers of the basement, and the decomposing impurities beneath." These causes being removed, there were no more cases of the disease.

One hundred and eight applicants for admission were rejected, and fifty-one patients discharged, for the purpose of receiving more recent and curable cases.

"During the past, as in former years, we have had many unhappy instances of injudicious haste in bringing patients to the asylum. One lady was admitted five days after her confinement; another before the burial of the child whose death was the immediate exciting cause of her disease, and many who were far too ill to travel."

"Thirty-four patients (eleven males and twenty-three females), have been admitted during the year with strong suicidal propensities. In several of these cases the ancestors had committed suicide, in two of them for three generations. In one male, it was impulsive; he was also homicidal, and left home at his own request, because he felt that the inclination to destroy his children, whom he loved tenderly, was gradually strengthening, while his power of resistance was growing weaker.

"All the epileptics (10) admitted, and the cases (6) of general paralysis, had either epileptic or intemperate ancestors."

Of the 390 patients received, the disease was directly hereditary in the numbers and manner shown in the subjoined table:—

	Men.	Women.	Total.
From the paternal branch of the family	30	20	50
From the maternal branch	16	30	46
From both paternal and maternal branches	8	9	17
Total	54	59	113
Collateral predisposition manifested in the insanity of brothers, sisters, or cousins	10	19	29
Numbers in which there was a family pre- disposition	64	78	142

Thus, in 28·97 per cent. of the cases the disease was hereditary; and in 36·41 per cent. there were relatives insane. A larger number received the predisposition from the father than from the mother. This does not accord with the result of the researches of Dr. Baillarger, of Paris, which showed, as has been formerly mentioned in our notices, that, so far as the data which he had collected were concerned, a large majority received it from the mother.

"In one case included in the preceding table, the maternal great-grandmother, grandmother, mother, and two aunts, and the paternal grandfather, uncle, and two sisters, and one brother, have been insane. In another, the maternal grandmother, two uncles, and mother, the paternal grandfather and uncle, and two brothers, have suffered from attacks of insanity.

Improper cases received.—Typhoid fever, 1; chorea, 1; phthisis, 1; drunkards, 8; feigned insanity, to escape imprisonment, 2. Several, also, placed under the head of subacute mania, were simply cases in which there was mental prostration with tranquil delirium, the result of grave organic diseases. It is well known that when the brain and heart are seriously involved, there may be more or less prostration of the intellectual faculties; and when the lungs are implicated, often a state of exaltation not amounting to insanity. These persons were in such a feeble bodily state that we could not refuse them, although improper cases for admission, fearing they might die on their return home, as some lived in distant parts of the State. Most of them never left their beds after reception; some died in a few days, and others lingered for several weeks.

A patient received from one of the county poor-houses "had been for more than a year chained to the floor of his cell, and destitute of clothing and bedding, because *his habits were destructive and filthy*. He had lain upon straw, which was changed two or three times a week, and the person who attended him '*always carried a cow-hide, because he always attacked him, and he could only control him by whipping him.*' This man is now quiet and comfortable. Application has recently been made for the return of another, who, the superintendent of the poor states, '*has been in chains for months, and is in the most filthy and wretched condition.*'"

Dr. Smith, of the Missouri Asylum, in his Report for 1854, discusses the question of the propriety of establishing separate asylums for the incurable insane, and, after giving his reasons for condemning the plan, says:—"I rejoice in the reflection that America has never been disgraced by one, and I trust that period will never occur." We, also, are opposed to such special institutions, but an asylum for incurables is not necessarily a

disgrace to any nation. Some of those upon the continent of Europe stand, confessedly, in the foremost rank of establishments for the insane, and we have seen several of them which would not suffer in comparison with some of our asylums for both curables and incurables. Indeed, of the fifty-six *public* institutions for the insane which it has been our lot to visit, the very worst, with but a single exception, is in one of the original thirteen United States of America.

If our country has not been disgraced by an asylum erected particularly for the incurable insane, has she not been, is she not still disgraced by something even more objectionable? Read the several memorials of Miss Dix, embodying the results of her observations of the insane and their manner of treatment in the poor-houses, prisons, cellars, and specially-constructed cells in several of our states! Go to the numerous poor-houses, which have been, and still are, in effect, asylums for the incurable insane, with all the objectionable and none of the redeeming qualities of those to which Dr. Smith objects, and learn what is there to be learned. Or, simply, read the above extract from the report of Dr. Gray, and we may then ascertain whether our course, in the treatment of those who are alienate of reason, is such as to exempt us from reproach.

For ourselves, rather than allow the incurables to remain, as they are this day, we would rejoice to see them collected, to-morrow morning, into purely *technical* "asylums for the incurable." The establishments once in operation, the Argus eyes of trustees, of the Association of Medical Superintendents of Asylums for the Insane, of the communities in which they might be placed, and last, though far from least, of Miss Dix, so long as Heaven shall bless her with life and health, would watch them with a vigilance sufficient to prevent a large proportion of the abuses now heaped upon the unfortunate persons who would become the inmates of them.

Patients admitted from January 16, 1843, to Dec. 1,	
1854	4,313
Discharged, recovered	1,789
Died	511

"The *Opal* is still edited and published by the patients, and its proceeds devoted to their comfort and amusement. The profits of the last year, with the avails of a fair held by the ladies, amounted to four hundred dollars, which has been expended for books, improvements in the greenhouse, and in amusements. The *Opal* now receives about three hundred periodicals and newspapers in exchange."

The number of patients in the New Jersey State Lunatic Hospital, at Trenton, is as follows:—

	Men.	Women.	Total.
Number of patients 1st Jan., 1854	98	107	205
Admitted in course of the year	56	67	123
Whole number	154	174	328
Discharged, including deaths	46	69	115
Remaining at the close of the year	108	105	213
Of those discharged, there were cured	25	32	57
Died	11	12	23

Causes of Death.—Consumption 4, general exhaustion 8, dysentery 8, epilepsy 1, apoplexy 1, asphyxia 1, congestion of the brain 1.

“During the months of August and September, a number of cases of dysentery occurred, several of which proved fatal.

“Besides the Museum and Reading Room,” remarks Dr. Buttolph, “as a means of occupying and amusing the members of our household, we are now engaged in the erection of a calistheneum, or exercise room, twenty by sixty feet in extent, for the use of the female patients; also, a ten-pin alley for the men. Both these structures are being erected by aid of contributions from various benevolent individuals, and will form very valuable means of promoting both physical health and mental tranquillity.” The calistheneum is within the inclosed grounds for the women, and its estimated cost is one thousand dollars. Messrs. Morris, Tasker, & Morris, of Philadelphia, have contributed a “self-regulating hot-water furnace” with which to heat it, and several gentlemen, mostly in Newark, have given money to the amount of 675 dollars.

The laudable benevolence of many of our fellow-citizens is rapidly bringing some of the public establishments for the insane into a proper condition in regard to the facilities for curative treatment. As one extreme is often followed by its opposite, it may, perhaps, ere long, become a question whether there is not a danger that the desolation, the barrenness, and the wretchedness of the mad-house of the past, will be followed, in the Hospital for Mental Disorders of the future, by an objectionable and deleterious luxury.

Two additional wings to the Trenton Asylum are in progress. The house has been so much crowded by the number of patients during the year, that their proper classification has, at times, been impracticable. But a small part of the report of Dr. Buttolph is devoted to subjects which would particularly interest our readers.

“That which the skeleton is to him whose general form it represents, when in his prime of manhood,” such must be our notice of the report for 1854, of the Pennsylvania Hospital for the insane.

We must fully coincide with Dr. Kirkbride in his remarks, that "because entire accuracy in every point may not be attained, it can hardly be urged as an excuse for not attempting to approach it; nor is it a sound reason for omitting all statistics, that wrong inferences and unfair comparisons have occasionally been made from some that were not entirely reliable. . . . I have never been able to discover a sound reason why tables of carefully recorded facts, or even of the opinions of intelligent physicians in reference to insanity, should not be just as important and reliable as if made in regard to other diseases."

	Men.	Women.	Total.
Patients in the Hospital Dec. 31, 1853	112	123	235
Admitted in course of the year			178
Whole number			413
Discharged, including deaths			190
Remaining, December 31, 1854	117	106	223
Of those discharged, there were cured			98
Died	15	11	26

Causes of Death.—Phthisis pulmonalis 6, acute mania 5, softening of the brain 4, epilepsy 1, paralysis 1, chronic bronchitis 1, acute inflammation of the bowels 1, dysentery 1, diarrhoea 1, pneumonia 1, acute dementia 1, disease of heart 1, hydrothorax 1, old age 1.

"There has been little acute disease of any kind—except of the brain—and no tendency to any of the summer or autumnal epidemics which prevailed in many parts of the country." The hospital has been full throughout the year, often crowded, and as many as fifty applicants for admission were not received.

	Men.	Women.	Total.
Patients admitted since the opening of the hospital	1384	1192	2576
Discharged, cured	661	574	1235
Died	157	114	271

From two of the tables given in the report we derive the following in reference to the relative proportion of the different forms of mental disorder, and of their comparative curability:—

	Admitted.	Cured.	Per cent.
Mania	1273	738	57.97
Melancholia	628	324	51.58
Monomania	358	147	41.06
Dementia	306	25	8.17
Delirium	11	1	9.09

Of the 223 cases still remaining in the hospital, some will undoubtedly be restored to health, modifying, somewhat, these results.

The greater proportion of the annual reports of a public institu-

tion for the insane, pass, in each successive year, into the hands of a new set of readers. For this reason we have ever approved of the plan of entering into a more or less detailed account of the moral treatment in every report. To the constant reader this may become monotonous, but that effect is as nothing in comparison with the influence for good upon the minds of the people in regard to the true nature of these institutions, which cannot fail to be produced by such a course. In but few of the reports from our hospitals is so much space customarily devoted as in those of Dr. Kirkbride.

During nine months of the year, three entertainments in each week are given to the patients. "One evening is now devoted to scientific lectures, another to the exhibition of dissolving views, with interesting explanations of the scenery or pictures shown, and interspersed with music; and the third to music alone." On the other evenings of the week the teachers read to the patients in the wards. "The interest in these readings has been increased by the introduction of some pleasant exhibitions and music. The value of all this class of means can hardly be properly estimated by those who have not made a systematic trial of them, using them not, at long intervals, as a rare gratification, but frequently, as a regular part of the treatment. . . . As a general rule, the more varied the pursuits of the patients, the more steadily they are kept employed in some way, the more comfortable they will be found to be, the better their general health and appearance, the more easily they may be managed, the less noise and excitement there will be in the wards, and the more efficient and valuable will be the services of those who are engaged in their care. No money expended in a hospital for the insane is better applied than when judiciously used in promoting these various objects."

A carriage-road on the pleasure-grounds for the men, similar to that on those for the women, is in progress. These roads will have a combined extent of a mile and three-quarters, and will be bordered with trees through most of the distance.

The Board of Managers of the Pennsylvania Hospital for the Insane, in view of the necessity for further accommodations, have determined to erect another establishment upon a tract of land containing seventy acres, immediately west of the pleasure-grounds of the present hospital buildings, "a site that cannot be surpassed for general adaptation and natural advantages; in a single tract, secured from encroachments by special legislative enactments." It is intended that it shall have "fixtures and arrangements of so superior a kind as, with the present buildings, to put our city (Philadelphia), in this respect, far in advance of any other on this continent, and to give to those who are mentally diseased advan-

tages nowhere surpassed." The estimated cost is 250,000 dollars, and the buildings will be commenced when 150,000 dollars shall have been subscribed.

The report contains an elaborate memoir of Jacob G. Morris, late a Trustee of the Institution, who was on board the steamer "Arctic" at the time of her loss, and met, with so many others, an untimely death. As institutions for the insane have rarely, if ever, received such attention and sacrifice from a trustee or manager, we should fail of justice were we to omit the following extracts:—

"Possessed of an ample fortune, and with a truly benevolent heart, the activity, energy, and sound sense of Jacob G. Morris, made him a desirable manager in the charitable institutions abounding in our city. . . . He made it a rule to expend all his income, whatever it might be; and as his own habits were in no way extravagant, a large portion of it was devoted to deeds of charity. . . . He was strictly conscientious, and whatever he believed right he carried out steadily and fearlessly, without regard to what others might think of his course. . . . He was elected manager of the Pennsylvania Hospital in September, 1844, and from that time took an active interest in all its departments. He was always ready to perform any services that were assigned him. . . . He was a frequent visitor among our patients, and was always joyfully received. . . . The slightest wish made by a patient, especially of the gentler sex, he rarely failed to esteem it a duty to gratify; and it was surprising what an amount of labour he would often undergo to enable him to effect it. It differed little with him whether it was to procure a toy for a child, patterns or materials for ladies' fancy work, a piano for a ward, a collection of books for the library, curiosities for the museum, or funds for some greater undertaking; he entered on the task with an equal zeal, and with an earnestness and hearty good-will, which never left a doubt of success. Rarely did he fail in anything he undertook; and his own gratification at such a result quite equalled that of those who were immediately benefited.

"He placed on our walls several valuable oil-paintings, and purchased expressly for the museum a large collection of curiosities; besides making numerous presents of a useful or ornamental character." . . . When it was decided to erect the new hospital, as above-mentioned, "he at once offered 1000 dollars as his first contribution to the work, and devoted no small portion of the little time that elapsed before his departure for Europe, in calling attention to its importance and soliciting subscriptions in aid of the object. . . . In every part of his travels he visited all the institutions for the insane worthy of note, and collected every-

thing that he thought might be useful in our new undertaking. In the very last letter I received from him, this subject was earnestly dwelt upon, and, although anxious to be at home, he declared his willingness to return to Europe at any time as one of a commission to visit the best foreign institutions, defraying his own expenses, and contributing liberally to those of his associate." Truly, the Pennsylvania Hospital has met with a great, it is to be feared an irreparable, loss!

The report of Dr. Curwen, of the Pennsylvania State Lunatic Hospital, furnishes the following statistics.—

	Men.	Women.	Total.
Patients in the Hospital December 31, 1853	99	83	182
Admitted in course of the year	93	51	144
Whole number	192	134	326
Discharged, including deaths	65	47	112
Remaining, December 31, 1854	127	87	214
Of those discharged, there were cured . . . . .	..	..	29
Died . . . . .	..	..	22

Causes of Death.—Exhaustion of chronic mania 10, general paralysis 4, peritonitis 2, bilious fever 2, inflammation of brain 2, consumption 1, dysentery 1.

"In common with the surrounding section of country, our household was visited, during the latter part of summer and through the autumn, with intermittent and remittent fevers, in many cases of a very obstinate form, and of a very irregular character. The diseases were clearly attributable to an epidemic constitution of the atmosphere, as most of those attacked were, as far as possible, removed from the usual exciting causes of those diseases."

In discussing the etiology of mental disorders, Dr. Curwen maintains that no exciting cause will produce insanity, unless the nervous system be in a favourable condition for its development, and that that which is often assigned as the *cause* in individual cases, as, for example, the reading of the Bible, is rather the *effect* of previous mental depression dependent upon the abnormal condition of the body.

"In those who are natives of other countries, a different class of causes, to a certain extent, acts. The disappointment of their hopes, so fondly cherished and often so rudely crushed, the entire change of climate and mode of life, the difficulty of obtaining employment and support for their families, with the too frequent resort to intoxicating drinks, all contribute their share to bring on that condition of the system which ends in insanity; and the natural elasticity of the system appears to be so far destroyed that, in a large majority of cases, it never fully regains its former tone and vigour."

By the report of Dr. Harlow, of the *Maine State Asylum*, it appears that at that institution, on the 30th of November, 1853, the number of

	Men.	Women.	Total.
Patients was	61	58	119
Admitted in course of the year . . .	57	53	110
Whole number	118	111	229
Discharged, including deaths . . .	56	53	114
Remaining, November 30, 1854 . . .	62	53	115
Of those discharged there were cured .	26	23	49
Died	16	16	32

Causes of Death.—Dysentery 16; general paralysis 5; consumption 2; old age 2; marasmus 2; serous apoplexy 1; congestion of brain 1; typhoid fever 1; gangrene 1; epilepsy 1.

“About the 1st of August,” says the report, “an *epidemic diarrhœal dysentery* broke out in our wards, and for three months little else than the sick and dying occupied our attention. There was scarcely an individual connected with the hospital family who escaped the ravages of the disease. Officers, attendants, nurses, and assistants shared alike with the patients in the attack. Just in the midst of the epidemic, when it would seem the services of the superintendent and steward were most needed, we were prostrated and unable to perform our duties. Having no medical assistant, we were obliged to call in a neighbouring physician to attend the patients. Fortunately, the trustees were able to procure the valuable services of ex-Governor Hubbard, who was formerly, for several years, a member of their board, and who has always felt and taken a deep interest in the hospital. He visited us daily for four weeks, and attended upon all the sick in the house till we were able to attend to our duties.” Of ninety persons attacked by this epidemic, seventeen, of whom sixteen were patients, and one, a female attendant, died.

The number of patients admitted, since the first opening of the hospital for their reception, is 1430. Discharged, 1316, of whom 590 had recovered. Died 175.

To avoid the labour and the inconveniences attendant upon the return of patients who, on the supposition of recovery, have left the hospital with the formalities of a regular discharge, but who, after a few days, either suffer a relapse or give evidence of imperfect restoration, Dr. Harlow has adopted the plan pursued at some of the European hospitals, of discharging all in regard to whom he has “doubts of their fitness, on trial, for a period of two weeks.”

Of 1200 *patients* who have been in the hospital, 586 had

insane relatives. It is not stated whether these 1200 were so many *persons*, or merely so many *cases*, including a considerable number of re-admissions of the same person—conditions which materially affect the percentage.

In some remarks upon the deleterious effects of a forced early *intellectual* education, Dr. H. remarks that he “was most forcibly struck, in reading an account of a class of students who graduated at one of our New England Colleges, in 1827. It was found that of this class, numbering twenty-three, all but two had survived the lapse of a quarter of a century; and it was also found that nearly every member of the class had arrived at adult age before entering college, thus escaping that premature excitement and development of the intellect which paves the way to mental disease, and furnishes tenants for many an early grave.”

At the date of this report an additional wing for females was in course of construction.

In the report for 1855 we are informed that the new wing is completed, and occupied. The original design is thus finished, and the hospital can now accommodate two hundred and fifty patients.

	Men.	Women.	Total.
Patients in the Hospital, Nov. 30, 1854 . . .	64	51	115*
Admitted in course of the year.	66	62	128
Whole number	130	113	243
Discharged, including deaths	44	44	88
Remaining, November 30, 1855	86	69	155
Of those discharged, there were cured			41
Died			19

Deaths from general paralysis 5, epilepsy 3, chronic diarrhœa 3, tubercular consumption 2, congestion of the brain 3, old age, nephritis, and typhoid fever, 1 each.

“The propensity,” says Dr. Harlow, “that exists in the minds of many of the friends of our patients, to remove them from the hospital too soon after they have been admitted, continues to be an evil which we should be glad to see eradicated. We are happy to say, however, that the evil appears to be growing less from year to year.”

Patients admitted since the Hospital was opened . . .	1559
Discharged recovered	631
Died	193

“Owing to the two epidemics, and the great calamity by fire, with which the hospital has been visited since its existence, the bill of mortality is larger than (that of) some similar institutions.”

* The number assigned to each sex does not correspond with that of the report of the preceding year.

Basing his calculation upon the results obtained by the commission which took the census of the insane and the idiots in Massachusetts, in 1854, Dr. Harlow concludes that, in Maine, there are 1365 lunatics and 560 idiots. "The question arises," he remarks, "where are all these 1365 lunatics, and what is their condition? Some are cared for at home by their friends, either chained or caged, if unmanageable, and some 150 are in the hospital, while by far the largest proportion of them are at the various Almshouses in the State, many of them caged and chained, because they can be kept a few cents less per week than it costs at the hospital." Where is that *other* "Maine Law?"

At the New Hampshire Asylum for the Insane, on the 31st of May, 1853, the number of

	Men.	Women.	Total.
Patients was	70	73	143
Admitted in the course of the year	72	69	141
Whole number	142	142	284
Discharged, including deaths	67	56*	123
Remaining, May 31st, 1854	77	84	161
Of those discharged, there were cured	34	29	63
Died	7	7	14

"During the whole year our household has enjoyed remarkable physical health. We have been entirely exempt from epidemics of all sorts, and acute disease has been almost unknown. Cleanliness, regularity of life, and a most healthful location have been the chief causes of this desirable state of things. The deaths which have occurred, with a single exception, were of those who for a long time were considered incurably insane, and who at last were literally worn out by the continued and unrelenting force of their malady.

"Through the whole year our female halls have been full, and often crowded, and our male halls at all times crowded." This condition "prevents a proper classification of patients, and seriously interferes with all curative measures." Dr. Tyler therefore recommends that an additional wing be erected.

"We can in almost no case infallibly pronounce a person incurably insane; certainly the records for the year show the recovery of some whose improvement seemed impossible, and whose present condition, among their friends, and in perfect health and soundness of mind, seems a miracle.

"The house is now lighted with gas, and we not only find its use more convenient, comfortable, and cleanly than oil, but its

* These numbers are quoted from the report. But if 67 men and 56 women were discharged, the number remaining would be 75 and 86, instead of 77 and 84.

brilliant light a curative means, in making our previously half-lighted halls cheerful and pleasant."

Report for 1855 :

	Men.	Women.	Total.
Patients on the 31st of May, 1854	77	84	161
Admitted in course of the year	45	40	85
Whole number	122	124	246
Discharged, including deaths	50	41	91
Remaining, May 31, 1855	72	83	155

Among the patients who were discharged recovered, Dr. Tyler says there was "a man of intelligence and education who was for nearly eleven years an inmate of this institution."

The asylum is rapidly becoming filled with incurables. But about one-half of the applicants for admission can be received. The doctor recommends that an additional wing be erected. A building for the violent patients is in progress.

From the answers to circulars sent to every city and town in New Hampshire, and from other sources, Dr. Tyler ascertains that there are thirty-five insane persons belonging to the State who "are supported by their friends or guardians in hospitals in other States; and that there are now resident in the State more than 550 insane persons, only 155 of whom are in this asylum. Of the remainder, many are kindly and comfortably taken care of at home, or with friends, or at almshouses; but others are chained, and caged, and sadly neglected; in filth, and exposure to the inclemencies of the weather. Some instances of cruelty and neglect have lately come to our knowledge, that, if known, would startle the neighbourhoods in which they have occurred."

Whole number of patients from the opening of the Asylum	1284
Discharged cured	547
Died	118

At the Vermont Asylum for the Insane, on the 1st of August, 1853, the number of

	Men.	Women.	Total.
Patients was	183	189	372
Admitted in course of the year	77	86	163
Whole number	260	275	535
Discharged, including deaths	72	74	146
Of whom there were recovered			80
Died			40

It appears that a large number of the patients at this Asylum are employed on the farm, in the garden, and in the workshop. Dr. Rockwell also encourages them to join in "all amusements which require exercise of the body as well as diversion of the mind, and especially riding, walking, playing billiards, ten-pins, quoits, and the like." He would "rather they would play chess, draughts, cards, and such like games than do nothing."

	Men.	Women.	Total.
Patients, August 1st, 1854	188	201	389
Admitted in course of the year	78	86	164
Whole number	266	287	553
Discharged, including deaths			159
Remaining, August 1st, 1855			394
Of those discharged, there were recovered			79
Died			52
Whole number of patients since the opening of the Asylum			2393
Discharged, recovered			1127

The unusually large number of deaths during the last year, is accounted for, in part, by the prevalence of a severe and fatal form of dysentery, which appeared among the patients in the early part of summer, and continued with unabated severity throughout that season. The number of attacks is not mentioned, neither is that of the cases in which it proved fatal. Warned by the two epidemics which have been mentioned, the directing authorities of the institution have ordered the construction of two infirmaries, one for either sex, wherewith, in the event of a future similar invasion of disease, the invalid patients can be isolated from the others. These apartments have been commenced.

The State Lunatic Hospital of Massachusetts, at Worcester, has for several years been greatly, almost unjustifiably crowded with inmates. It, its officers, and its patients have at length obtained some relief. The inconvenient and unwholesome condition of things has been changed for the better. Another State Hospital has been erected at Taunton. To this, on the 7th of April, 1854, "and on each of the five succeeding Fridays, a *car load* of patients" were transferred from the hospital at Worcester. The number thus removed was 210. No accident occurred in this rarely-paralleled migration. "The patients were mostly of a very orderly class, and they were gratified with the ride. Notwithstanding this great abstraction from its wards, the hospital was left "quite full, but not crowded," and it became possible to abandon the use of a number of cells and improperly-contrived rooms which had long been tenanted by patients.

	Men.	Women.	Total.
Patients in the Hospital, Dec. 1, 1853	266	254	520
Admitted in course of the year	125	174	299
Whole number	391	428	819
Discharged, including deaths	198	210	438
Remaining, Nov. 30, 1854	193	188	381
Of those discharged, there were cured	45	77	122
Died	15	19	34

Causes of Death.—Marasmus 5 ; consumption 4 ; lung fever 4 ;

maniacal exhaustion 7; apoplexy and palsy 3; epilepsy 2; erysipelas 2; suicide, dropsy, chronic dysentery, diarrhoea, congestive fever, asthma, and jaundice, 1 each.

In connexion with the causes of insanity, Dr. Chandler makes the following remarks:—"Probably in no part of the world are the causes of insanity more numerous and more active than among the population of Massachusetts. Here the mind, and body too, are often worked to the extreme point of endurance. Here wealth and station are the results of well-directed efforts; and the general diffusion of intelligence among the people stimulates a vast many of them to compete successfully for these prizes. But in the contest, where so many strive, not a few break down. The results on their minds may not, perhaps, be any less disastrous, whether wealth and station are obtained, or not. The true balance of the mind is disturbed by prosperity as well as by adversity. It is only in a sound body that the manifestations of the mind are sane and entirely healthy. As a people, we cannot boast of the highest standard of physical health, although we may of general intelligence, enterprise, and hard work."

In the course of the year 1855, very important improvements were made in this establishment. Not the least of these was the introduction of the apparatus for heating by steam, and that for ventilating by mechanical power. Relieved, by the hospital at Taunton, of its great excess of patients, and brought by improvements, more nearly into conformity with the idea of the times, this institution may still, for a long number of years, continue its career of usefulness. Indeed, it seems that Dr. Chandler is unwilling to acknowledge that it has ever merited the impression which has been made upon the public mind in regard to it. "Whatever," he remarks, "may have been said against this hospital—and most of what has been said about its defects, has been so said as an excuse to make it still better—it has always afforded, and does now, with all the progress made in others, a residence as comfortable and as cheering, and as healthful to the patient, as any similar institution in this country."

In this expression we believe Dr. Chandler is mainly correct. The only exception suggested relates to the hygienic condition of the building. It can hardly be assumed that, with its comparatively low ceilings, and its imperfect ventilation, it can be so healthful, other things being equal, as some of the similar edifices more recently erected. For the impression which has gone abroad in regard to it, the Board of Trustees who have the control of it are chiefly responsible. They drew the picture of its defects; and if their painted grapes bear such a resemblance to reality that the birds have pecked at them, truly it is not the birds that should bear the blame. All who have visited the

hospital are well aware that the picture was a sketch of the shady side alone, and that another, drawn from the sunny side, might be made as attractive as the first was repulsive.

From its earliest years we have been a not unfrequent visitor to this hospital, and in this place we feel bound to acknowledge our belief, that from its origin, it has been not only *well*, but *very* well managed. We would shun invidious distinctions—we shall make none; yet justice demands from us the expression, that there is no institution in the country at which we could, at any time, have placed a friend with greater confidence that all his necessities would be supplied; that his comforts would be carefully ministered to; that he would be shielded from abuse; and that his restoration would be wrought for with watchful care, with constant assiduity, and with that skill which is the result of a good professional knowledge, combined with practical experience.

"We avail ourselves of this occasion," write the trustees, in their report, "to bear testimony to the fidelity and signal ability with which Dr. Chandler has discharged the duties of his position, and to the great success which has attended his labours during the whole period of his superintendence."

Dr. Chandler has resigned his office, and Dr. Merrick Bemis, for some years one of the assistant physicians of the hospital, has been appointed as his successor.

	Men.	Women.	Total.
Patients in the Hospital Dec. 1, 1854	193	188	381
Admitted in the course of the year	86	113	199
Whole number admitted in the course of the year	279	301	580
Discharged, including deaths	111	133	244
Remaining, Nov. 30, 1855	168	163	336
Of those discharged, there were cured	50	59	109
Died	13	14	27
Admitted from Jan. 18, 1833, to Nov. 30, 1855	2451	2505	4956
Discharged, recovered	1089	1195	2284
Died	281	272	553

Of this aggregate number of deaths, 87 are attributed to marasmus; to "consumption 67; apoplexy and palsy 59; maniacal exhaustion 59; epilepsy 50; suicide 22; lung fever 22; disease of the brain 21; disease of the heart 20; diarrhœa 19; erysipelas 17; old age 14; typhus fever 11; dysenteric fever 10; dropsy 10; inflammation of the bowels 8; hæmorrhage 6; cholera morbus 5; chronic dysentery 5; gastric fever 5; cholera 4; mortification of the limbs 3; from intemperance 3; bronchitis 3; congestive fever 3; hydrothorax 3; convulsions 2; asthma 2; disease of the bladder 2; cancer 2; jaundice 2; land scurvy 1;

concussion of the brain 1; fright 1; rupture 1; pleurisy 1; chorea 1."

In reference to the salubrity of the hospital, this schedule of the mortality among almost five thousand patients, in the course of a period but little less than twenty-three years, is well worthy of a careful perusal. Its testimony is more reliable than that of individual opinion; more forcible than arguments deduced from theories of architectural construction. The almost entire exemption from fatal epidemics, from severe endemic fevers, and from other acute diseases, to which it bears record, will find but few parallels in any other institution of the kind in any quarter of the globe.

Under the table of "Causes," we find the following remarks:—

"Spiritualism of the present day is of the last (moral) class of causes. This singular mental phenomenon has for some years engaged a part of the minds in this vicinity, and some few cases have been brought to us, the past as well as previous years, arising, it was supposed, from investigating its phenomena, and from believing in its supposed truthful revelations of the future state of existence. If it was true that this process of investigation did really open to the mind any knowledge of the world to come, not revealed to us by the Scriptures—which many of its votaries assert and believe—then it would be a cause calculated in the highest degree to engage, excite, and disturb the mind. But it has been said by those best prepared to investigate closely, that the responses through the mediums contain no ideas of this or the next world, that were not then, or had not previously been, in the mind of some one present. It may be a new faculty of the mind, but its field of operation lies this side of the grave."

In regard to moral treatment, Dr. Chandler writes as follows:—"We recognise the principle of giving the largest liberty, and the greatest freedom from restraint, in each case, consistent with the security of the individual and safety of the community. . . . About one-half of our patients perform some kind of labour, more or less useful. For plain work, the patients are ready and very efficient. One day this autumn the patients, with one hired man, dug, took off the tops, and put into the cart, 480 bushels of carrots. Some are ingenious mechanics. Two have assisted the carpenters most of the season. One gentleman has made all the soft soap—350 barrels a year—and some of the bar soap, for five or six years. He has gathered the materials, made and distributed, and attended to the economical use of it. No one can make better soap than he. Two have made our baskets for years, and have supplied themselves, in part, with

clothing. One female has made pantaloons and vests to supply the demand in our family. The females make the shirts, and knit the stockings; they wash and mend; they cook, and they help about all our domestic affairs. . . . Whip-lash braiding . . . is the best employment I can think of to introduce among our patients in-doors."

The Report for the fiscal year ending with the month of November, 1852, is the latest which we have seen from the Boston Lunatic Asylum :—

	Men.	Women.	Total.
Patients at the beginning of the year	100	141	241
Admitted in course of the year	41	11	52
Whole number	141	152	293
Discharged, including deaths	34	15	49
Remaining at end of year	107	137	244
Of those discharged, were cured	17	5	22
Died	14	8	22

Causes of Death.—Consumption, 8; debility, 3; general paralysis, 3; epilepsy, 2; chronic mania, 2; smallpox, 1; "Asiatic diarrhœa," 1; old age, 1; marasmus, 1.

"It is a noticeable fact," writes Dr. Walker, "that no death from dysentery has occurred. This disease has prevailed extensively among us for several successive years, always bringing with it great suffering and ceaseless anxiety. Early in August it appeared in a very violent form, bringing several of our household rapidly to the verge of the grave. Fires were immediately lighted in the furnaces morning and evening, so that when the patients were rising and retiring a current of warm air should be passing through the halls and bedrooms. . . . The most unpromising cases speedily began to amend, and at the time when the disease usually raged the most fiercely, not a case was under treatment."

The Report for 1851, from this institution, contained a brief but interesting account of the case of an Irish boy, among the patients. This account was, in whole or in part, transferred to our notices. The Report before us states that the boy has left the institution "giving promise of future usefulness."

New York City Lunatic Asylum, on Blackwell's Island :—

	Men.	Women.	Total.
Number of patients on the 1st of January, 1854	232	310	542
Admitted in course of the year	224	262	486
Whole number	456	572	1028
Discharged, including deaths.	211	262	473
Remaining, December 31, 1854	245	310	555
Of those discharged, there were cured . . . . .	..	..	186
Died . . . . .	..	..	190

Among the cases cured, there were four of delirium tremens. Of the cases admitted, nine were improper subjects for the institution.

Causes of Death.—Cholera, 83 ; consumption, 34 ; paralysie générale, 19 ; typhomania, 9 ; “debilitas,” 9 ; epilepsy, 8 ; congestion of brain, 7 ; dysentery, 3 ; chronic diarrhœa, 3 ; old age, 2 ; typhus fever, pneumonia, erysipelas, hydrocephalus, albuminuria, suicide by suspension, injuries of head, injuries from fall, “submersion,” peritonitis, gastroscirrhus, pericarditis, ascites, 1 each.

Dr. Ranney gives the following account of the cholera, by which, as will have been perceived, nearly one-half of the mortality was occasioned :—

“The epidemic commenced on the 22nd of July, and terminated on the 22nd of August. An attendant, however, was attacked on the 11th of September, and died in twelve hours. Four of the other attendants had cholera of a severe form ; but all recovered. It seemed more violent and proved more fatal than in 1849, and nearly the same class was affected—viz., those in whom the constitution was greatly impaired from chronic disease, and the mind reduced to the most hopeless state. Frequently, the first warning was complete collapse, characterized by blueness of the skin, coldness of the surface, and loss of pulse. Cramps were less common than in 1849. If diarrhœa occurred, as a premonitory symptom, it was readily checked by medicine.

“Chronic diarrhœa has become much less frequently a cause (of death) since the introduction of Croton water on the island.”

Of the 486 patients admitted in the course of the year, only 97 were natives of the United States. Of the foreigners, 241 were from Ireland, 91 from Germany, 21 from England, and 9 from Scotland ; the remainder were from various countries. 100 were supported by the Commission of Emigration, and all these were emigrants of the preceding five years.

“A large proportion of the recent emigrants recover, the derangement of mind being generally produced by privations on ship-board, and the changes necessarily incident on arriving in a strange land. Their exposures and sufferings are occasionally very great in crossing the Atlantic, and, in a few, the aberration of intellect has seemed to depend entirely on the want of sufficient nourishment. A poor German boy was admitted last March, who had just arrived in New York. His suffering from starvation had been so great as to obliterate from his memory all knowledge of having crossed the ocean, and he fancied himself in his fatherland ! He would implore me, in the strongest terms, to allow him to go on his journey, as in a few hours he would meet

his father and mother, who were anxiously awaiting his return. Then a change would come over him, and he would imagine that he was detained as a culprit. He would plead his innocence with feeling eloquence, and in the most melting terms. These delusions were so firmly fixed that he would listen to no explanation, and the only effectual quietus was the liberal and constant supply of nutriment. His thirst fully equalled his appetite for food. I subsequently learned that he was a native of the Grand Dukedom of Baden, and that he had been seventy days in making the voyage from Bremen to New York. In two weeks the delusion disappeared, and he became fully conscious of his condition. In two months his mind was perfectly restored, when he left the asylum, as noted for excessive fatness as he had previously been for his emaciated and meagre appearance."

We rejoice to learn, as we do from the report for 1855, that one of the foulest blots which has rested upon the practical psychiatry of our country, has at length been effaced. "The most decided improvement ever made in this asylum," remarks Dr. Ranney, "has been consummated the past year. I refer to the entire removal of prisoners, not only from their immediate connexion with the insane, but from the institution.

"From 1826 to 1847, the work of the asylum was performed, and the principal charge of its inmates taken by persons transferred from the different penal institutions on the island. At the commencement of the year last named, six of that class were employed in each of the halls, and between fifty and sixty engaged as domestics about the building. One-fourth of the whole number at the asylum being convicts, the institution differed little, in its *morale*, from a prison. It was urged upon the common council, 'that the same individuals who were committed in the city as criminals, and required an armed keeper in the penitentiary, were sent here to take charge of a class who require the most mild and soothing treatment.' But the memorials sent, soliciting a change in the system, produced no effect."

And be it remembered that no action was taken upon the subject until after the asylum had ceased to be one of the footballs of partisan politics, by that worthy act of the State Legislature, which wrested the government of the Almshouse Department of the City of New York from the municipal authorities, and vested it in a Board of Governors selected in equal, or nearly equal numbers, from the two most prominent political parties of the day. The change commenced in 1850, when prisoners were removed from three of the halls for patients, and has gradually progressed to its final completion.

	Men.	Women.	Total.
Patients in the Asylum Dec. 31, 1854	245	310	555
Admitted in course of the year	163	208	371
Whole number	408	518	926
Discharged, including deaths	170	183	353
Remaining, December 31, 1855	238	335	573
Of those discharged, there were cured			200
Died			100

The disease of six patients, recorded among the cured, was *delirium tremens*.

Deaths from consumption 29 ; paralysie générale 18 ; epilepsy 7 ; chronic diarrhœa 7 ; typhomania 6 ; old age 5 ; congestion of brain 5 ; hemiplegia 3 ; anasarca 3 ; inflammation of brain 2 ; apoplexy 2 ; typhus fever 2 ; hypertrophy of heart 2 ; pneumonia 2 ; bronchitis, pleurisy, hydrothorax, ascites, erysipelas, scorbutus, and accidental drowning, 1 each.

So long as the circumstances controlling the population of this institution shall continue such as they are at the present time, so long must its annual records present a large bill of mortality. It is, in fact, the receptacle of the offscourings of the civilized world. Of the 371 patients received in 1855, only 78 were natives of the United States, while 293 were foreigners. Of the latter, 288 were Europeans. Ireland was represented by 178 ; the German States, including Austria and Prussia, by 68 ; England by 19 ; and eight of the other nations by smaller numbers. Some of these came with broken constitutions, many of them under the depressing influence of disappointed hopes, many with the typhoid effects of the voyage by sea still upon them, and some labouring under a combination of two or more of these vultures to vitality. There are also other causes, perhaps of minor importance, but still of sufficient magnitude to swell the sum of forces tending to a fatal issue.

The moral treatment at this institution is gradually becoming broader, more systematic, and more effective. Musical concerts, or parties, have been held from two to three times in each week. "New Year's Day, the Fourth of July, Thanksgiving, and Christmas, were appropriately observed. The oration delivered by one of the inmates, on the Fourth, is a creditable production. The reading of the Declaration of Independence, the music, and the original ode, would compare favourably with the usual ceremonies on similar occasions. About three hundred and fifty patients joined in the celebration.

"One of the most pleasant and interesting of our amusements has been the holding of 'Moot Courts.' Many could directly participate in these, either as plaintiff, defendant, counsel, judge, or jurymen. The minor offences alone were tried by this supreme

court of Blackwell's Island. The judge, noted for benevolence and wealth, and preferring to pay the damages rather than have any one suffer from the uncertainty of the law, gave decisions—unlike those of the city courts—satisfactory to both parties.”

The reports by Dr. Fonerden, of the Maryland Hospital for the Insane, are very brief, limited almost exclusively to a short account of the changes in the patients resident, and to such subjects appertaining to the management of the hospital as are of merely local interest. The statistics of those now under review, are condensed into the subjoined table :—

	1853.			1854.			1855.			AGGREGATE.		
	M.	W.	Tot.	M.	W.	Tot.	M.	W.	Tot.	M.	W.	Tot.
Patients on the 1st of January .	68	62	130	57	60	117	56	63	119	68	62	130
Admitted in course of the year .	29	21	50	23	23	46	42	28	70	94	72	166
Whole number	97	83	180	80	83	163	98	91	189	162	134	296
Discharged, including deaths .	40	23	63	24	20	44	39	29	68	103	72	175
Remaining, December 31 . .	57	60	117	56	63	119	59	62	121	—	—	—
Recovered	8	3	11	10	7	17	13	13	26	31	23	54
Died	7	2	9	5	3	8	13	4	17	25	9	34

Previously to the year 1855, some cases of *mania à potu* were received at this institution ; but we are informed by the report for 1850, that such cases are not enumerated in the tabular accounts of the insane.

From the report of Dr. Stokes, Physician to the Mount Hope Institution, near Baltimore, we extract the subjoined numerical results for 1854 :—

	Men.	Women.	Total.
Patients on the 1st of Jan., 1854 .	45	87	132
Admitted in course of the year . .	54	51	105
Whole number in course of the year .	98	139	237
Discharged, including deaths . . .	41	48	89
Remaining January 1, 1855 . . .	56	91	147*
Of those discharged, there were cured	19	18	37
Died	7	8	15

Causes of Death.—Acute mania, 2 ; apoplexy, 1 ; Bright's disease, 2 ; epileptic convulsions, 2 ; puerperal mania, 2 ; exhaustive mania, 3 ; phthisis, 2 ; “gradual senile decline,” 1.

“Erysipelas and dysentery prevailed to a considerable extent during the summer, but in no case did they prove fatal.

* All these figures are given as they are in the report, without an attempt to harmonize them. Of men, there were 45 at the beginning of the year, and 54 admitted ; yet the total is made 98. Of the women, the two items and the aggregate similarly disagree. It is stated, in general, that 41 males and 48 females were discharged ; yet, immediately afterwards, in giving the details of cures, improvement, deaths, &c., the number of males is made 42, and that of females 47.

"During the entire year the institution has been rather more than comfortably filled."

From the remarks upon "premature removals," we make the following extract: "Those practically familiar with the habitudes of the insane, and the motives and influences under which they act, know full well that many, who are violent, noisy, and outrageous whilst under the care of their friends, become calm and docile when subjected to the mild but firm discipline and moral treatment of an asylum. Such a change does not indicate a cessation, or even (in some instances) the mitigation of disease; it merely shows that it is held under control by the varied influences brought to bear on it. . . . Many of our inmates who are peaceful and contented, cheerfully occupied throughout the day, entering with pleasure into the amusements and recreations afforded them, or rambling at will in the grounds of the asylum, would become unhappy and unmanageable if restored to the exciting cause of their malady."

We proceed to the report for the year 1855 :—

	Men.	Women.	Total.
Patients on the 1st of January . . .	56	91	147
Admitted in the course of the year . .	49	46	95
Whole number in the course of the year	105	137	242
Discharged, including deaths	59	61	120
Remaining, Jan. 1, 1856	46	76	122
Of those discharged, there were cured .	19	7	26
Died	7	7	14

Of the patients who were discharged improved, or unimproved, forty-six belonged to the district of Columbia, and, being supported by the national government, were transferred to the Government Hospital for the Insane, near Washington.

Upon the subject of injudicious visits to patients, by their friends, Dr. Stokes says: "It is astonishing with what a reckless and criminal disregard of the most earnest representations of the injury likely to be inflicted, this course is persisted in. Thus it is that the patients' mental health and future happiness are often jeopardized by the indiscreet action of those most interested in their recovery. Strange to relate, after informing them that such a step is calculated to entail chronic insanity upon the patient for life; that its certain effect will be to protract the disorder, and thus increase and prolong the trouble and expense of his maintenance, many instances have occurred during the past year wherein they have obstinately persisted in their insane course."

The following case is related in the observations upon epileptic mania: "In a case now under treatment the person, whose attacks seldom amount to spasms, or even a distortion of the

features, but in whom the loss of consciousness is complete for the time, would really seem to possess two natures. His life presents two decidedly distinct phases; the one embracing a period of a week preceding or following the attacks, during which he is suspicious, timid, apprehensive of plots to destroy him, malicious and vindictive. He is then irritable and imperious, violent and gloomy. In the other phase, in a manner normal, his character manifests itself under an entirely different aspect, exhibiting the capacities of a man in possession of good sense, and free from all extravagance."

In four cases, the abuse of opiates is alleged as the cause of the mental aberration. "Opium," remarks Dr. S., "is much more used by females than by males, and there exists abundant proof that the vicious habit of this indulgence prevails much more extensively than is supposed. From two to four ounces of laudanum a day is by no means an unfrequent allowance."

Among the facilities, and the adopted plans for moral treatment mentioned in this report, are books, music, embroidery, excursions, a saddle-pony, musical reunions, dancing, games, and newspapers. In the report for 1844, it is mentioned that the anniversaries of the Fourth of July and Christmas are appropriately observed.

The report by Dr. Stribling, of the Western Lunatic Asylum, Virginia, extends over two fiscal years:—

	Men.	Women.	Total.
Patients in the Asylum, Oct. 1, 1853 .	217	160	377
Admitted in the course of two years .	90	63	153
Whole number	307	223	530
Discharged, including deaths . . .	81	61	142
Remaining, September 30th, 1855 .	226	162	388
Of those discharged, there were cured .	32	30	62
Died	36	22	58
Whole number of patients admitted			
from July 1, 1836	801	537	1338
Discharged, cured	302	214	516
Died	186	109	295

Since the last preceding report the Asylum has been so much crowded with patients that 141 applicants were rejected. Hence Dr. Stribling requests the Board of Directors to "again invoke the attention of the General Assembly to the subject of founding another asylum for the insane," and expresses his confirmed opinion that if another institution of the kind be determined upon, it should be placed in that part of the State which is west of the Alleghany mountains.

Dr. Stribling has frequently been called from his hospital duties, by subpoena, to act as an expert in courts of law. "The

Board of Directors, perceiving the evil likely to result therefrom to the interests of the asylum, presented the subject, in their report for 1843, to the legislature, and asked, 'that this officer be released from obligation of obeying such mandates, and that he be allowed, as some other officers of the Commonwealth, to give his testimony or opinion in the usual form of deposition.' The suggestion was promptly acted upon, and a law passed to that effect." Subsequently, upon receiving a subpoena in a criminal case, he refused, under this law, to obey it. The question of the constitutionality of the law, so far as relates to criminal trials, was thereupon discussed before Judge Fulton, and he, in the language of Dr. Stribling, "sent his officer with an attachment to *coerce* my attendance. The attachment was not executed, only because, under the advice of learned and able counsel, I became satisfied that, in this case, at least, 'prudence was the better part of valour.'"

Now, in our humble opinion, Dr. Stribling and his Board of Directors were wrong in the premises. We think that no superintendent of an institution should be exempt from obedience to a subpoena, in any case, either criminal or civil, in which his opinion as an expert is important to the issue. We have few experts of the kind. They are, almost without exception, connected with the institutions for the insane. Those institutions have, or ought to have, competent assistant physicians. Thus, we believe that a law releasing the superintendents from duty before legal tribunals, would be more seriously detrimental to the cause of justice, and to the welfare of society, than useful to the inmates of the institutions over which they preside.

From the few statistics of the reports of the State Lunatic Asylum of South Carolina, we select the following:—

	1853.			1855.		
	Men.	Women.	Total.	Men.	Women.	Total.
Patients at the beginning of the year . . . . .	...	...	135	...	...	174
Admitted in the course of the year 40	35	...	75	...	...	62
Whole number in the course of the year . . . . .	...	...	210	...	...	236
Discharged, including deaths . . . . .	...	...	38	...	...	65
Remaining at the end of the year 91	81	...	172	86	85	171
Discharged cured . . . . .	...	...	22	...	...	18
Died . . . . .	...	...	9	...	...	31

In regard to the mortality in 1855, Dr. Trezevant says: "We have lost 31 patients; 15 of these, from their enfeebled state, would have died under any circumstances, but their death was hurried on by the improper accommodations of the house, and

the unwholesome condition of the yard. The rest suffered from bowel complaint, then prevailing, and were the victims of our want of proper ventilation and arrangements. . . . In dry seasons the mortality is about five per cent., but in wet it has been equal to about one in three. In the present year the bowel affections commenced with the rainy season, continued whilst it lasted, and ceased when the earth was no longer saturated with moisture."

We have carefully perused the reports before us, and find therein but little which comes within the scope of our notices, while that little is upon subjects already fully laid before our readers. The chief burthen of the reports from this institution, for several years past, consists of an exposition of the imperfections of the Asylum, and the necessity of a new one. The building is old, and imperfect in its architectural construction and arrangements. Its grounds are too limited, and are immediately surrounded by dwelling-houses of citizens of Columbia. It appears that one or more of its wards are so damp as seriously to affect the health of the inmates. The whole is so much crowded that, as stated in one of the reports, there are fifty patients more than can be properly accommodated. The heating and ventilation are bad. There are no proper arrangements of baths and water-closets. In short, judging from the reports, the whole establishment stands but as a representative of the past. It is acknowledged as such by the Regents, the Physician, and the Superintendent. This has been granted for years. The question, therefore, has been—What shall be done? We have exposition after exposition of the defects. We have suggestions for erecting additional buildings to those which now exist. We have propositions to erect an entirely new establishment upon the lands now occupied. We have argument upon argument to prove that a new structure should be erected more remote from the town. And yet the question is—What shall be done? There is a liberal appropriation yet unexpended. Different models have been presented for the new edifice. One of these is preferred and highly extolled by one party, but rejected and condemned in the strongest terms by another. And still, alas! still the question is—What shall be done? And the relic of the past, with "all its imperfections on its head," continues unmolested, and its inmates rejoice in the comforts of antiquity, because the powers that be cannot agree upon a substitute.

ART. V.—ON THE PHYSIOLOGICAL AND PSYCHOLOGICAL
PHENOMENA OF DREAMS AND APPARITIONS.

[No. III. OF A SERIES.]

Continued from Vol. IX. page 561.

WE would now direct attention to those powerful reminiscences in dreams, when past impressions which had been long forgotten come back like voices of departed spirits, unseen and unbidden. And probably there is not any class of phenomena which possesses more psychological importance in elucidating the science of Mind.

When we dream of events long since passed away, we seem to resuscitate all the persons necessarily connected with them, sometimes with the partial consciousness that these very persons have long since been dead. On other occasions we are at places and in countries we had never previously visited, and yet we give to the buildings a classic correctness, and preserve a distinct difference in the costumes of the inhabitants. In some instances we may recollect, on waking, that our knowledge of all these particulars we had derived from books, whilst in others we cannot remember any authority from whom we had received information. But in the dream, under all conditions and circumstances, there is no misgiving as to the actuality of all our impressions. These impressions of persons and things sometimes pass before the mental vision, not like dissolving views, but with a lifelike distinctness.

We may remark, on this interesting subject, that, when there is often in the waking-state a train of thought suggested by a word, a sound, a scent, &c., yet these involuntary efforts of the memory may reproduce on these impressions but merely faint outlines, just sufficient to renew the association and then rapidly pass away, and are shortly quite evanescent. But there is this marked difference in dreams—that, whilst there is reproduced persons and things which have been but superficially noticed in their actual conditions and existences, will become, during the vision of sleep, so vivid, as if they had delineated on the brain by a pencil of fire.

There are many other phenomena worth a brief notice. For instance, the working of the brain in some dreamers is not unlike that in certain forms of cerebral disease. The reminiscences seem to be hurried on helter-skelter, as in some species of delirium. Events, with all the *dramatis personæ* which are seen, float like indistinct *spectra*, and pass away before the sleeper seems to have had time to fully recognise them.

We may also mention, for the reflection of the psychologist, that sometimes, however, there are events which occur, and persons which are seen by the dreamer to him seem strange, neither of which does he recognise ; and even his waking intellect arrives at the conclusion that they have been the pure creations of the dream, so oblivious is the individual of any pre-knowledge of either the things or persons : but suddenly, however, there is a conviction of the verity of the events and actual existence of the persons seen in this vision of the sleep. And, curious enough, that such persons, although dead, “yet speak” with all their respective peculiarities during this mental resurrection of the dream. It has already been remarked, that in dreams of most kinds, the dreamer is himself the principal actor. This is a necessary consequence of his *egoism*, which gives him not only a personal identity, but tends, by preserving this intuitive perception of his own individuality, to furnish the best evidence of his psychological attributes. Hence, whether the mind reproduces past impressions or those of recent occurrence, they furnish an indubitable proof of its magical power over time and space. The mind, in fact, seems to be endowed with a Promethean daring, drawing fire from heaven, and has thus communicated life and energy to its own creations ; and thus its apparent eccentricities become one kind of evidence for its own immortality. All these phenomena may be quite compatible with perfect mental health. There are some persons who are known in their waking-state to exaggerate, even under the most ordinary circumstances ; it is, therefore, not any wonder that in their dreams they should be guilty of the greatest absurdities and of utter impossibilities during their sleeping adventures,—so that their dreams resemble some forms of insanity.* Thus, in the cases of which we speak, there seems to be not any *distinct* individuality. For a little, weak, vain man, even should he be emaciated, will in his dream conquer giants, and destroy with perfect ease the most ferocious animals, and this without the slightest misgiving as to the reality of the acts, or anything like doubt as to his own herculean powers.

An interesting illustration was related to us, which will explain the latter statements, even should a commission of lunacy pronounce the individual *non compos mentis*. The narrator and hero of the dream was a very small man, of a nervo-bilious temperament, very thin and very irritable. He said—“A short time before I got up, I had a dream, in which I saw that burly, thick-headed, Dr. A—— come to see us, accompanied by his tall,

* It is not our intention to discuss this subject, and we may merely remark, that a writer in a recent number of the “Psychological Journal” endeavours to prove a general resemblance between dreaming and insanity. We only contend for this special instance.

fat, eldest daughter. The latter asked, with her usual volubility, if we had heard some *new* compositions, with the names of the authors she enumerated, ending with *vini* or *celli*, and so forth. Before I could reply, her impudent father burst forth in a horse-laugh, saying, 'What does he know of music? Men of his age have not much appreciation of classical compositions. All these sort of folks can comprehend is some pretty little simple English ballad! Ha-ha-ha! what does our little friend know or care for brilliant and elaborate Italian music?' And he ha-ha! 'd again and again. This attack aroused my *self-esteem*, and as I threw my head back, my stature increased amazingly, and my muscles acquired, instantaneously, a vast intensity of power; so, turning savagely on the burly doctor, I called him an impertinent fellow, and spun him round like a peg-top. He turned quite pale, and with a gruffish tone, and a bravado shake of the head, said, 'Pray don't do that again!' I was mightily pleased to think this great bullying boaster was somewhat cowed; then it was my turn to banter—'Well, Mr. Doctor,' I said, sarcastically, 'what are the fanciful and showy compositions of your modern *artistes*, to be compared to the Ambrosian and Gregorian chants, which, being somewhat altered from their original Hebrew compositions, will remain, from their inherent excellence, admired for their beauty and grandeur whilst the human mind can appreciate what is excellent and perfect in musical harmony?' In my vehemence on a subject of which I knew very little, as is usual in such dreams, I awoke, and then heard one of my own children playing a fantasia on the pianoforte, which no doubt had suggested the subject of the dream and the dispute, which, strange to say, was sustained with all the peculiarities of each speaker." The dreamer laughed at the absurdity of his moving such a huge mass as the doctor, and said, "It is, indeed, well that this adventure had occurred in a sleeping vision, for I am quite sure that had I in reality have attempted to do him any indignity, my burly friend would have despatched me with one blow."

We recollect meeting with a patient at a private asylum, who was a pigmy in stature, and as feeble as a boy, yet, when his *self-esteem* was offended, he would have a paroxysm of passion, and give expression to the most fearful execrations, with threats that he would crush the contemptible fellow who had so grossly insulted him. Once started, all seemed clear before him. Then he would continue for hours, and sometimes for days, to tell the most marvellous tales of his prowess, and the number of victims he had immolated to his ire; whilst his almost superhuman acts of strength he had performed, must have convinced all how dangerous it was to begin with him. And woe unto him who

had the temerity to treat him with contumely,—death was not sufficient; he could only be satisfied by annihilating such evil-doers from out of all human society.

But to proceed—we may observe, that the individuality of the dreamer is even shown by the activity of some of the predominant powers of his mind. We do not mean to repeat a previously-stated view, “that in dreams of most kinds the dreamer is the principal performer;” this is a necessary consequence of the constitution of the mind. Nor is it simply because he fashions and changes past and present events that this individuality is rendered obvious. It is in the fact, that whatever may be the temper, disposition, and intelligence of the individual, he will manifest similar traits during sleep and when awake. Probably, in the latter state he might modify a statement, or remain silent when it might injure him; or he might permit himself to be literally “all things to all men,” but in the dream; then his actual character shows itself; the exceptions we shall subsequently notice. If a man is irritable in his normal state, he will be highly choleric in the dream. If parsimonious naturally, his sleeping thoughts will be of gold, and so forth. Whilst in general, world-sensual men will have animal dreams, and moral men the reverse. Yet even these states are modified by the state of the health and the previous active or inactive state of the mental faculties in general. And we shall subsequently explain, that wicked, and even brutal dreams may be experienced by the moral and the most benevolent.*

In our experience, we have come to the conclusion, that dreams are often capable of furnishing a *moral* as forcibly as some of the ancient apologues. We will cite one example: A friend of ours happened to mention a curious incident, on a point of natural history, in a discussion on physiological subjects; and on the following evening whilst in the reading-room belonging to the society, he overheard, quite unintentionally, a small-minded man speak of his statement to another person, as “a traveller’s tale,” and as he immediately recognised the narrator, he looked silly and confused. Our friend, indignant at the implied charge of invention, simply addressed the libeller, saying, “Sir, although men of ordinary capacity, and extensive readers, recognize that though the incident mentioned is rare, it is not a solitary instance. But if there are in this institution weak persons who deny a fact, because it forms no part of their own experience, I’ll obtain the evidence of the correctness of my report, from the gentleman who is in the possession of the speci-

* We shall have a curious physiological fact to expound in connexion with this topic. As there is a practical advantage to be deduced from these statements, we hope especial attention may be given to them.

men to which allusion was made, and which you have unfairly doubted." The small man made some shuffling apology, and for the time the affair dropped; but our friend, in a letter, repeated his statement, and received a reply endorsing its accuracy. He therefore took the first opportunity of reading the correspondence to the assembly in which he had previously narrated the fact which had been disputed. Still, he felt annoyed that anyone should have had the bad feeling to attribute to him the meanness of uttering an untruth, merely to excite the wonder of any assembly. The circumstances still irritated him, even after he went to bed, and which seem to have suggested a curious and singular dream;—he related it thus: "I thought that, somehow or other, I discovered great havoc among my papers, and found out that it was a mouse, deliberately, and with *malice prepense*, who had been the delinquent: there seemed to be great wantonness, as some of my rarest manuscripts were the most mutilated. And, as in dreams we are not very particular as to evidence, there seemed a perfect conviction that the only motive which induced the injury arose from a certain satisfaction which this creature derived from witnessing my anger and chagrin, as I had from time to time to remove the fragments. Every means to detect this secret enemy was, for a time, of no avail, and at length a mere accident revealed the mischievous little cowardly fellow, who every now and then stealthily came from his hiding-place, and slowly and deliberately commenced his depredations. But the moment his small, bright twinkling eyes caught a sight of me, he hurriedly sneaked away. This apparent impunity induced him to return again to his spiteful work, and as in my indignation I threatened him, he darted into the room, and rushed rapidly through an open window, and, although I commenced instant pursuit, I only succeeded in giving him a tap with a stick, at which he squeaked, and succeeded in escaping in safety. Some one then addressed me, saying—'It is well you did not kill it: if you had, there would have been a combination of some kind, to be revenged by the entire destruction of your life's labours.' This information made me doubly indignant, and, in the irritation of my mind, I awoke, and for a time I marvelled what could have suggested such a dream, and was much amused to think that it must have resulted from reflecting on the injury which such small minds could do, as he who had nibbled at my character, by designating an important physiological fact 'a traveller's tale;' and that he had not manifested any manly courage to dispute it openly, but had had recourse to a sly and secret method of injury. What petty jealousy! And was it sufficient punishment for his bad faith that I had justified the correctness of my communication, without fixing

the blame of misrepresentation by naming the libeller? And yet I had a presentiment that if I had done so, such a contemptible nature would have tried other methods to disfigure my character. These thoughts have evidently induced the train of ideas which had taken the particular views of my sleeping vision. And hence it seemed true, that often there is a moral in a dream."

We must now trace some curious phases of dreams which result from partial fatigue of the brain; and when there is a state of complete sleep of the organs of the intellectual faculties and moral attributes, and an undue activity of the animal propensities. We admit that it is true in some measure, that dreams are modified by the pursuits of men, and by the natural character of individuals, although the latter is not always the case. And hence it will answer one of the objects of this essay, to explain an important physiological fact, and one which is too important to be passed by unnoticed, but which must not be regarded as counteracting any of our preceding views;—it may be considered as an exception:—it is, however, valuable for not confounding the accidental thoughts of a dream, as indicating the moral condition of men; and it furnishes important data to prove that pious and worthy people would do well to study the mental laws, for some of the best persons may dream of things and actions which disgust their waking consciousness, and in their sleep they may perform actions which may excite a sense of horror that, under any circumstances, they could entertain the most horrible conceptions.

The solution of this enigma is simple and easy, and so far as inductive reasoning is to be depended on, almost as satisfactory as if it could be actually demonstrated. When persons have been much engaged during the whole day on subjects which require the continued exercise of the intellectual and moral attributes, they may induce so much fatigue and exhaustion of these powers, that in their sleep, to their subsequent sorrow and surprise, they may have the most sensual and most vicious dreams! And they may, on awakening, under the violence of their own impressions, marvel at the fact that such should have been the case, as they had, even though tired, addressed the Lord with prayers for his manifold mercies and sustaining power, as manifested during their respective occupations. And they may perfectly recollect, that, prior to closing their eyes in sleep, they had not entertained any impure associations, or had occupied their thoughts with any reflections on the criminal condition of different members of the community.

On the contrary, they may remember that they had calmly looked back on a well-spent day, and, strongly impressed with one idea,

that they might be permitted to continue their labours of usefulness with a renovated mind and body on the ensuing morning. And yet, under such a state of mind, and with such inclinations, nevertheless, scenes of the most polluted kind, and actions the most depraved, haunt the dreamy thoughts. Now, all this occurs from a non-observance of the Creator's laws. Such persons have sustained an undue exercise of the intellectual and moral powers, so as to induce intense fatigue in them, whilst the animal propensities had remained in a state of comparative inactivity. These latter powers (the animal propensities), being wide awake, they, in their turn, manifest greater energy in consequence, whilst the intellect revives imperfect impressions. Acting with the animal propensities, these revel as if under their respective *stimuli*, and hence the debased and brutalized dreams which result.

Had the intellectual attributes been more active and vigorous, they would have restrained in some degree, the vagrant thoughts; but, from their being in a dormant condition, they ceased to act as "the board of control," and therefore the propensities indicate the greatest excess;—memory furnishing a variety of incidents, either read or spoken of, whilst fancy aids in fanning the overstrained energy of the feelings, manifest their blind and impulsive condition, as when acting from the stimulation of real occurrences. These explanations furnish satisfactory data to explain the whole phenomena.

In saying these things we may still admire the wisdom of Zeno, which induced him to regard a dream as a test of virtue. For he thought (according to Plutarch) that if in a dream a man's heart does not recoil from vicious suggestions, there was an immediate necessity for self-examination and repentance.

If our explanation is correct—and numerous facts could be cited to render this obvious,—we demur at anything like actual responsibility for any thoughts which may actively occur in our dreams under the circumstances indicated. Even should our normal mental condition be shocked or disgusted that any such notions should have been entertained with all the vividness of reality, and though we repudiate any criminal responsibility from these visions of sleep, yet we, nevertheless, think that such dreams should be heeded. And if they occur involuntarily, we should begin to ascertain the cause, and endeavour to regulate in a better way both our mental faculties and the functions of the body. We should study the profound laws of God, by which we should ensure corporeal health and sanity of mind. We should recognise the importance of being "temperate in all things," and therefore avoid giving way to excess, even in sustaining the most elevated and spiritual thoughts; so that the

exercise would then be natural, and in every instance invigorating and beneficial; for it is an indisputable truth, that when we regulate our varied powers, without excess of any kind, we ensure refreshing sleep, undisturbed by dreamy visions of any kind; and our lives would then be useful to others, agreeable to ourselves, and ensure a lasting satisfaction.

If the position is cramped, it may of itself be the source and the predisposing cause of a painful dream and a state of lassitude. But if there is an easy and natural position, and the bodily health is good, every shadowy reminiscence will be agreeable, and the individual will awake with a sense of being refreshed. We could cite many painful dreams which result from *dyspepsia*, in which the mind conjures up the most gloomy scenes and witnesses events of the most painful and harrowing kind; and it is equally tenable that lying on the back, by heating the *cerebellum*, will also be a cause of prurient associations, from the afflux of blood to that organ.

Imperfect as this essay must be considered, yet we deem a brief recapitulation of the arguments and explanations of dreams essential, prior to directing any special attention to apparitions; and our review will have another object—it will enable us to connect the disjointed portions, by showing that they still have some actual connexion.

In the first instance, we considered Nature's object in causing that complete state of rest of mind, and that passive state of the body, in sound sleep; we submitted evidence that the mental organs, like those of volition, suffered a condition of fatigue in the ratio of their respective exercise; that when there is sustained a certain amount of activity, so as to induce depression of the mental energies, and bodily lassitude, serious injury would result to the organic instruments, if some provision had not been made for their preservation;—that this renovation is effected in the act of sound and refreshing sleep; the various parts of the mental machinery of the bodily apparatus have lost portions of their materials by the frictional wear and tear resulting from excessive activity; and besides what they have sustained, they have lost some of the nervous power essential for their different functions; that this loss is renewed during perfect sleep; the *blood* supplies the new material for the purpose, and the nerves, those skilful workmen, apply this for repairing the machine. But for these salutary results, the brain must impart an impetus to keep the vital motions; and unless the brain is refreshed from its own labour, these results could not be effected. It is therefore essential for insuring these processes that the sleep should be sound, natural, and easy; for just as it is well known that unnutritious blood is poisonous and unfit for the

process of reparation, so also the nervous fluid is vitiated when elaborated by an overtaxed brain; and then its tendency is, to induce a series of morbid impressions, and of disturbance of all the vegetative functions; and thus, conjointly, they become destructive to the happiness of the individual.

In course of these investigations we have clearly indicated four states of the muscular system, either as predisposing the kind of dream, or as directly inducing the phenomena during the sleeping vision:—

Firstly. The incapacity of moving, arising from some uncomfortable position of the limbs, inducing cramp; or from pressure on the heart, from lying on the left side, as in nightmare; in both phases affecting *per se* the circulation.

Secondly. When indigestion causes horrid dreams from exciting sensations of terror. Then the muscles seem partially paralysed, in the same way, and with similar consequences, as when a person in the waking-state is under the influence of strong fear.

Thirdly. When dreaming of some muscular effort being made, and continued for some time, which produces a similar exhaustion of nervous power, in the same way, and in a similar degree, as if a corresponding effort had been made in a state of complete consciousness, and with the perfect volition of the person.

Fourthly. When after a long illness there results a perfect prostration of strength, arising from extreme muscular debility, there will be disturbed dreams, in which are experienced great weariness and a sense of perfect incapacity of any manipulative power, and a sense of loss of locomotive power. In such cases the sufferer is invariably the victim of arbitrary and harsh treatment.

It has also been shown that dreams are ordinarily the result of partial rest of some of the cerebral organs and the over-activity of others; and that the congruity or incongruity of these nightly visions will depend on the number of the associated organs of perception, or their accidental defective association. That in the latter case ideas of the past are mixed up and stimulated by incidental sources of irritation from remote organs, when there exists a state of imperfect consciousness.

Whatever may be the subject of dreams, it will be confessed that they form an interesting episode of the nervous life, which is not only important to the physiologist, in tracing the connexion of such dreams to certain normal or abnormal actions of the living organism, but that they form a subject of interest also to the psychologist, as furnishing the latter with triumphant natural evidence that man's undying mind, however bound and fettered by its natural organization, seems to manifest greater power

in proportion as the direct influence of the latter is partially suspended.

We are also taught a lesson in moral science from dreams. For, although we reject the inference of Zeno that such nightly visions are the reflex consequences of man's moral condition, yet we think one purpose would be answered by admitting his views, with certain qualifications, such as we have already indicated. We might, for example, apply, practically, some part of his recommendation,—that is, exert ourselves in the exercise of our moral perceptions, and thus acquire a great *surveillance* over our waking thoughts. Then, whenever in our nightly visions we become strongly affected with grossly prurient or cruel ideas, so diametrically opposed to our ordinary thinking, and which we had never entertained during our perfect and normal consciousness, we should then regard such dreams as indicating some form of nervous disturbance, and seek the aid of a physician to restore the organs implicated. For the importance and verity of these views, we may remark, that often the most morbid trains of thought result, both in our waking and sleeping state, from deranged secretions.

Lastly, we venture to assert, that the statements in this essay furnish positive data for explaining "the philosophy of dreams;" or, in other words, the different phenomena are confirmed on the *theory* of the predisposing causes which produce them.

It is often said that the whole period of a man's life is a dream. Such may be the case, figuratively speaking; but we should remember, that even in this life's dream there are vast distinctions and differences.

Much of the happiness of individuals depends on the proper exercise of the bodily and mental faculties. Hence there is, in some degree, more in the kind of education given than in any connate peculiarities. That if an individual is trained to obey the laws of health in reference to the bodily functions, and to regulate his animal appetites by the dictates of an elevated moral code, under the influence of a cultivated intellect; that he would be enabled by such an education to render the *feelings* the servants of his will, and, not as is generally the case, his imperious dictators. When such a mental training shall be given, then "the life's dream" will not only be more agreeable and satisfactory, but what is still more important, such a being may reasonably calculate to awaken from the sleep of death with powers more elevated and ennobled, and experience a conscious bliss without any disturbing influence, from a conviction that he has attained a *real* state of existence, in which all manifests the beautiful and the true, and where animal appetites cease to affect him.

It was from ideas of this kind which first suggested, and subsequently confirmed, the actual verity of apparitions. What, for example, more natural than to suppose our departed friends might visit the spots once dear to them, and in their spiritual capacity breathe a blessing on us? or, that they watched over our welfare with an additional solicitude, from their own experience of the various temptations which may warp the best disposed? or, that those who had trampled on the moral laws, which, by excluding them from scenes of bliss, had, as a consequence, doomed them to wander on the earth, and seek in the hours of night (so kindred with their own sullied natures), the very spots where their crimes had been committed, and which was to be to them an endless source of torture?

Apparition-seeing, then, differs from dreaming, in this particular,—that in the latter state we acquire an actual experience that all we have perceived in these nocturnal visions had not any actual existence, but were merely reminiscences formed by the active mind during our sleep; whilst, apparitions being seen when our senses can take cognizance of objects, and when they are apparently affected, normally, by their respective *stimuli*, it is not a matter of surprise that their *actual* existence should be admitted. These phenomena we shall, however, prove to be waking dreams!

Premising that, as a certain amount of exercise is essential to the health of the body and the mind, it is also true that over-exercise is fatal to both conditions.

In reference to the corporeal functions, when they are subject to excessive and too long-sustained fatigue, there is induced a state of lassitude which may end in such a degree of exhaustion as to merge on disease; and that if the mental faculties are so over-taxed as to induce a too susceptible condition, sufficient to banish sleep, many morbid ideas may be experienced, having reference to the previous state of the individual, his opinions, occupation, and so forth.

We may also incidentally remark, that when the perceptive faculties, in their normal states, are powerfully impressed with real objects, ideas or pictures of them are mentally perceived; and these impressions are retained, even when the objects which first produced them are no longer cognised. It matters not whether we recal them by the laws of association in the course of conversation, or whether they are revived in a dream; they have in both instances all the vividness of reality. There is, however, this marked difference, that in a normal state of mind there is a distinction made between the abstract ideas and the objects which suggested them. Thus, if we have seen certain persons, or visited particular localities, we have the power to

reproduce either when absent from us. In the waking-state we call this memory, and during sleep we designate these revived impressions dreams.

In the latter, however, the continuity of the ideas may be disjointed, and our visions may be an heterogeneous combination; but so soon as we recover our perfect consciousness we distinguish what is incongruous and discrepant with our original experience.

To render our notion of what is the condition of the brain when apparitions are seen, we have only to notice the phenomena in *delirium*,—in which state all that passes in the fevered brain is regarded by the individual as real; and, in his case, there is an incapacity, as in ordinary dreams, to correct the complex and confused impressions which, to him, have an actual existence. We have witnessed many painful and amusing instances as confirmatory to the statements.

Thus, the visions of dreams, and in the delirium of fever, as being dependent on certain conditions of the brain, may be rendered important for elucidating the present section of our essay, particularly when we observe in connexion with this information the morbid trains of thought resulting from the depressing passions of *fear*, anxiety, despondency, and so forth.

If, for example, a person has been long indisposed, and he is of a naturally timid and cautious disposition, should he be left alone late at night, and in a solitary and quiet locality, it might prove fatal to his sanity. For every sound, under such circumstances, may induce emotions of fear, until the heart's action is greatly disturbed; and, with this disturbance, the imagination may be rendered morbidly sensitive, and then it is probable he may fancy himself addressed by name. And if this state continues for any length of time, he will people every nook and corner with dark, scowling faces, until so great may be his terror at these ideal personages as to produce fits, or delirium, or insanity; and then he is confirmed in his notion, that the spectrii have indeed a real existence.

In every vision, therefore, whether seen in dreams or delirium, or under the influence of narcotic poisons, or from the depressing passions, the perceptions are more or less implicated—in some measure confused and distorted. Thus, objects are either smaller or larger than they are in nature; or they present mere shadowy outlines, and are either very symmetrical, or distorted—and they may be regarded as realities, or otherwise. This will depend on the degree in which the sense of *marvellousness* is experienced, as it is this faculty which gives a tendency to seek for the supernatural, and derives a kind of excitement amounting to a morbid craving, for tales of wonder.

Akenside, in his "Pleasures of the Imagination," has recognised its influence, and the strong desire it induces for everything that can minister to its gratification, and concludes, with us, that it is essential for a belief in apparitions. He graphically tells us:—

"————— by night
 The village matron, round the blazing hearth,
 Suspends her infant audience with her tales—
 Breathing astonishment!—of witching rhymes
 And evil spirits; of the death-bed call
 Of him who robbed the widow, and devoured
 The orphan's portion; of unquiet souls
 Ris'n from the grave to ease the heavy guilt
 Of deeds in life conceal'd; of shapes that walk
 At dead of night, and clank their chains, and wave
 The torch of hell around the murd'rer's bed.
 At every solemn pause the crowd recoil,
 Gazing each other speechless, and congeal'd
 With shiv'ring sighs: till, eager for th' event,
 Around the beldame, all arrest, they hang,
 Each trembling heart with grateful terrors quell'd."

And it is as obvious that the influence of this sentiment is experienced long after such had left the nursery: We therefore assert that, whatever may be the kind of spectre, it is seen by the mind's eye, and that it will be real, or the contrary, just as the *seer* possesses a strong sense of the marvellous, or otherwise. That this mental vision did not escape the penetrating intellect of Shakspear, we may cite the scene where the guilty Macbeth, under the combined influence of ambition, terror, and a strong marvellous tendency, was haunted by the instrument by which his intended murder was to be perpetrated. The celebrated dagger scene in Macbeth is true to Nature. Fevered by the *embryo* deed, and having been instigated to it by the satire and heroism of his wife, who had stirred up "his courage to the sticking point," we find him proceeding to effect the guilty act; and, although painfully awake, yet he dreams! Macready has comprehended the true philosophy of this extraordinary scene. He used to stand gazing on the outward space, with stormy and excited eyes, and in a tremulous, half-affrighted voice, begins—

"Is this a dagger which I see before me—
 The handle toward my hand? Come, let me clutch
 Thee.——"

To show that this fatal instrument was only seen as a consequence of his delirium, he continues—

"I have thee not, and yet I see thee still.
*Art thou not, fatal vision, sensible
 To feeling as to sight? Or art thou but
 A dagger of the mind—a false creation,
 Proceeding from the heat-oppressed brain?"*

The whole soliloquy is a most extraordinary delineation of the effect of intense ideas on a susceptible organization, with an active temperament.

We may therefore understand, that if the mind of any one so conditioned is impressed with the recollection of any person who may have departed this world in the ordinary course of disease, or by a violent death, that the idea, or picture, may become so mentally vivid as to be seen as clearly as if the *original* had still existed in this matter-of-fact world.

The *how* and the *why* may be difficult to explain. If an object is placed before the eye, it is said to be painted on the retina, or *disc*, from the pencils of rays of light, which affects the optic-nerve. The impression is then conveyed to the brain, and there its actuality is appreciated by our consciousness; and this impression can be revived at any subsequent event or word which recalls it by the association of ideas. Often these recollections are involuntary, as we may suddenly think of a friend, and, co-existing with the thought, is reproduced a mental picture of his individuality.

The state of mind called *reverie* but illustrates the condition essential to the seeing of apparitions. We met a friend, the Rev. U—W—, at a watering-place in the North of England. We had not met for years, and then it was at the hotel at which we were temporarily located. It was at the supper-table, and though mutually gratified, and undesirous of the meal, we did not leave the table, but sat unconscious of the presence of the strangers. We had an animated conversation on poetry, the drama, et cetera. Except preserving our respective personal identity, we were oblivious of our auditory, until a hearty laugh awoke us to our actual position. It was then that I remembered an engagement, but promised to return shortly; when I did get back it was late, having been detained longer than I had anticipated, the room was deserted, and the lights all extinguished except two, leaving "darkness visible," and in the imperfect glimmer I perceived my Reverend friend remained as motionless as a piece of sculptured marble! Was he asleep, or in one of his fits of abstraction? I spoke to him, but he answered not,—yet his full black eyes looked more than usually brilliant. I repeated my apology, as it was near "witching hour," but he neither heard nor heeded it.

Availing myself of the opportunity of studying the phases of

this rare occurrence, I watched his humour. There was a change every now and then came over his feature, like fitful clouds, and yet so well delineated that one might speculate on the thoughts which so deeply interested him. At one time he appeared to be listening to exquisite music, for his head assumed the position of one who was deeply interested, yet, at the same time, judging of the degrees of merit of the composition. Then his features assumed the expression of one engaged in an animated conversation. It was evident that whatever might be the subjects or objects which affected him, were within his own capacious head. He did not distract his associations with any thing or object, around, above, or beneath him !

After permitting my friend to continue in this abstracted condition for an hour, I touched his shoulder with just sufficient force as might have awoken a sleeper. He stared as one just roused from a dream, when I told him why I had been detained, and that I only regretted it on my own account, as he had plenty of company during my absence. This ambiguous sentence left it an open question, whether or not he would allude to his reverie. His answer comprehends the whole philosophy of the phenomena we are investigating.

He said, "I did not mind the company you left me with, or recognise the time they themselves departed, because, Sir, I had better associates, companions, the honoured of past ages and the most worthy of the present. What interest do you think I could feel in the fat, purse-proud, fashionably dressed-up vulgarities, who were, in all probability, more satisfied with contemplating their own insignificant individualities, than they would have been with my conversation. Sir, I repeat, I have had companions of my own selecting—the best specimens of humanity in the olden times. I have conversed with them, heard their opinions enunciated in harmonious numbers, and been delighted to drink in the full streams of wisdom which they poured forth, not in any niggard manner. Nor did this seem a mere abstraction—a purely spiritual reminiscence ; for to me they had all the reality of actual existence. I saw, heard, and to my inner sense, might have felt them."

Nor is this a solitary instance, when objects and persons in the outer world are unheeded, whilst the mind's eye recognises the creations of the ideality as real existences. This, then, is to all intents and purposes, spectre-seeing. The celebrated Baron von Swedenburgh, we are told, had constantly these waking-visions. It is related of him, that he would suddenly stop when walking in the street, and no one was near, yet he would make a low and most respectful bow, and continue his course. If interrogated why he had shown such a sign of reverence, he would

say that "the Angel Michael, or Angel Gabriel, or some other spiritual being, as the case might be, had recognised him, when passing by him," &c.

It is impossible to regard such acts, by such a man, as the result of weakness of mind, or imbecility, as the Baron's philosophical works, and his able essays on natural history and natural philosophy, prove him to have been a man capable of manifesting the most profound thinking powers.

The true solution is to be found in his cerebral organization; for he had a capacious forehead, and a most extreme development of the faculty of *marvellousness*. He, though capable of great intellectual efforts, had a tendency to *spiritualize* material objects, and *materialize* spiritual entities.

We may also cite a more recent instance—that of Blake, the artist, well known as having illustrated "Blair's Grave" and "Young's Night Thoughts." It is said of him that he was frequently found in his studio, painting away with great energy, and with an expression of profound reverence, fixing his eye on a vacant part of the room, as if he was minutely studying some aristocratic sitter. If he observed an intruder enter he would silently motion him to depart, and afterwards make an apology for his seeming rudeness, probably telling his friend that he was painting Moses, or Abraham, or some other worthy of antiquity. We ask what were these *ideal* sitters but actual apparitions—the beings of his vivid ideality, revived by strong and vivid reminiscences of works in which they had been delineated, and which he had reproduced in his waking-dream, and through the influence of his powerful organ of *marvellousness* he had regarded them as living personages?

Before we proceed to enter into the greater speciality of this part of our essay, we must offer a few remarks on *double* consciousness.*

There is a purpose and a final cause for the *duality* of the mental organs, as this may be—as in the case of the organs of external senses,—as a prevention of exhaustion from over-fatigue. Because when one hemisphere is tired the other hemisphere could perform the respective functions. In the same way as we may exercise one eye, or one ear, and then the other, Dr. Wigan, in his work on the *duality* of mind, has confounded an important and distinct subject; for we cannot confound the instruments with agents by which they are manifested. We admit his explanation of the metaphysical faculty of *attention*, and think with him, that this is a result of the simultaneous exercise of both hemispheres of the brain on one subject. That

* It will be remembered that we have already noticed the duality of the mental faculties, as resulting from two distinct hemispheres of the brain.

when both are attempted to be used for different kinds of thought, at one and the same time, the effect will be to enfeeble both. We merely now allude to the double set of mental organs, that we may explain the *double* consciousness, such as is carried on by the dreamer in his questions and answers to the persons of his sleeping reminiscences, and that of the apparition—revelations, in certain morbid conditions of the human mind.

How can we otherwise reconcile the fact that in dreams, spectre-seeing, delirium, and insanity, persons will hear voices which have not any existence but in their own brains. Such persons will hear themselves called, warned, reproved, and encouraged by the peculiar activity of one side of the brain (acting with the auditory and optic nerves), from its being in a different state to the opposite hemisphere.

We are told of a double consciousness, when one hemisphere of the brain is affected and the other normal,—that the one has insane ideas, which are corrected by healthy organs (see Gall's report of the case of Dr. Moser, of Vienna), when this actually occurred. We have often heard insane persons, from the same cause, go on sustaining a conversation for some time, when no one is speaking to them. They mistake the train of thought which occupies one hemisphere for some one addressing them, and they answer with the other.*

But this double consciousness may exist in healthier minds—as, for instance, in Lord Brougham and Cobbett. We saw the first write in the Court of Chancery, and attend to the pleading of Sir William Hone; whilst the other discoursed with us, and continued to write his "Register."

We mention these facts, as this pre-knowledge is essential to understand our subject; and we must bear in mind that the causes of double consciousness may be irregular circulation,—a want of uniformity in the action of *stimuli*, the greater activity induced in one hemisphere by the disease of fever, &c. Besides these well-observed conditions, we have the involuntary activity of some of its particular organs, either from their being previously much excited, or from some systematical and extreme cultivation. In either case inducing a fixed habit of thought; and the latter is often a cause of mental disease.

* Nor is this double consciousness confined to the dreamer or madman. Most persons of active and energetic minds are liable to be thus influenced. For example, a young man, full of energy, may have trains of thought dictated by his animal propensities, whilst their impetuosity and blind impulses as to consequences must be counteracted by a train of better motives suggested by the moral sentiments and the intellect. And if the latter have been duly cultivated, the protest of his better nature will often be heeded, and save the incipient offender from remorse or disgrace.

Some years since a circumstance occurred at Hull, which, though partaking of the marvellous, is capable of being explained on the above data, and we record it from having known the individual, who was an active member of the Mechanics' Institute. Mr. —, a whitesmith, had a son associated with him in his trade. They were both exemplifications of the disadvantage of "a little learning," if we test them by their sceptical notions on the immortality of the soul. One day they had been drinking together, when the father and son entered into a solemn engagement, that in the case of the death of either the departed spirit should revisit the earth, and make his presence known to the survivor. The son, soon after this, sickened and died, and, in all probability, the old man had a misgiving that the loss of his son was a penalty of their presumption. And thus his mind was constantly disturbed by this contumacious compact, and ultimately it induced a monomaniac condition. On one occasion, when the old man had been working very hard over his furnace on a very hot day, and had, in all probability, taken more beer than usual, he reports that, after a moderate supper, he went to bed, when, soon afterwards, he perceived his room filled with brilliant lights, and his sense of hearing was delighted with the sweetest and most plaintive music. He raised himself up under an ecstatic state of feeling, when he beheld a figure clothed in white approaching him; it smiled, looked kindly in his face, and as it disappeared, he recognised his deceased son! That he then awoke his wife, and in a very excited manner told her of the vision, when she said, "O don't think anything about it, you have been dreaming!" Yes, we believe it was a waking-dream. The intense light of the forge had acted on the retinae, and the extra stimulation had affected his irritable brain, which, with his previously long-cherished anticipation of such a visitation, had induced the whole phenomena. He had, it would seem, mentally perceived some such revelation, and being naturally *marvellous*, the wish was father to the thought, and under some peculiar condition of the brain, the anticipated event was realised.

The first correct notions we acquired on spectre-seeing was from a paper published by the late estimable Dr. John Alderson, entitled "An Essay on Apparitions," in which these appearances are accounted for by causes wholly independent of preternatural agency. After an examination, in the introduction, of the universal belief in ghosts and visions, he concludes by referring such phenomena to disturbance of the corporeal functions. In other words, all his own examples are in cases of *delirium tremens*.

We may incidentally mention, that sudden shocks to the

nervous system often induce lamentable consequences, particularly with females.

We will merely state one example. Mrs. R——, a highly nervous young woman, had been sitting up to watch her dying uncle, to whom she was greatly attached. Early in the morning, just after she had fallen into a doze, he died. Some person in the room at the time the event occurred awoke her, and suddenly told her what had happened; the consequence was, a most serious hysterical attack. Just before the coffin was screwed down, some few days after this latter occurrence, the same officious person induced poor Mrs. R—— to feel how cold her uncle felt; she did so, and then followed another frightful attack. It was three or four years after this, that we saw her under one of these fits, and certainly nothing could be more painful. There was a choking sensation, with a most unpleasant huskiness of the voice. This was followed by a tetanic condition of the muscles of the neck, chest, &c., and a complete engorgement of the blood-vessels; and what was most singular in her case was, with the appearance of one spectre-stricken, gazing in a vacant manner at some spectacle which she saw.* She gave a most piercing shriek, shivered, and then became so perfectly shut out from the outer world, that nothing could affect her senses or rouse her from her torpor; and the hand with which she had touched her dead uncle was as cold as a dead limb could be, whilst all the rest of the body was at a higher than the normal temperature, and we were told that whatever reminded her of her uncle, immediately reproduced the fit with its different painful phases.

We have often seen cases where spectre-seeing had been induced by the excessive use of narcotics, similar to those which are so common with great drunkards. One example will suffice. Mr. R——, a man of a superior order of intellect, but whose moral character was much debased, would, in the midst of a conversation, turn his head suddenly round, and chide some fancied intruder in language neither courteous nor refined. Being curious to know what his waking-dream was like, we asked his man-servant what could so disturb his master, and induce him to give way to such bursts of anger without any apparent cause? "Why, see, he fancies that an old crow is constantly pecking at his right shoulder; and it is terrible to see him after he has taken a more than usual dose of laudanum: then he turns round to this ghost of a crow in a most savage manner, and swears at him in a most vehement way."

In this case the erroneous impression was impressed so vividly

* She, on the occasions, saw her uncle—his funeral, and all that had previously developed her painful affection.

on his brain that, under every circumstance, it haunted his imagination, and it became chronic. The annoyance was aggravated to such a degree that he believed in the conviction of its being a crow with an extraordinary tenacity, without the slightest remission of the apparition. We have had confirmation of our previously-stated solution of the waking-dreams, and select the following, in which, although apparitions were constantly seen, the seer regarded them as optical illusions. We had occasion to visit H——, in Yorkshire, and called to see an old medical friend, who said, with a strong Yorkshire dialect, "I have a regular 'puzzler' for phrenologists—a man who sees ghosts, and don't believe in them." We expressed a wish to be introduced to him. The individual was a burly man, of the name of B——, with a large head, and strong perceptive faculties, which projected to such a degree as to render his eyes deeply seated. His temperament was nervo-sanguineous, and he had for years exercised the craft of a blacksmith. In a few minutes after our conversation commenced, it was evident that he was a natural sceptic in all things, besides ghost-seeing—a sort of village Spinoza. After asking him what kind of apparitions he saw, he replied, "Sometimes they are d—d ugly—then I send them adrift; but when they are very handsome, like the poor simpletons paint their saints, then I detain them, and describe them to my wife." "Do you see these spectres with your eyes shut or open?" we asked. "Why, it makes no difference; I see them either way." "Are you always in the dark when they make themselves visible?" "No; they come sometimes in the dark, and sometimes where there are lights." "Have you any pain or uncomfortable sensation about any part of your head at the time, or prior to your seeing them?" "Yes, sir; a sense of fulness between the eyes and over the eyebrows." In this case there is the clearest evidence that Mr. B——'s ghosts were purely mental, and they were the result of the involuntary activity of the perceptive faculties, like the visions in dreams. In Mr. B—— this condition may have been induced by his previous laborious occupation (for he had then retired from business), and from his habit of drinking quantities of beer. But then there was the "puzzler," he did not believe in what he saw; and when asked why he did not, he attempted a *rationale*, by saying, that he laboured "under an optical illusion!" This we refuted, as he saw these apparitions distinctly, whether his eyes were open or shut, in the dark and in the light. But on examining his head, the part considered by phrenologists as the organ of *marvellousness*, was so deficient, that it seemed as if the convolutions in that locality had been scooped out; so we concluded that without that wonder-quality men might see

apparitions and not believe the evidence, apparently, of their own eyes; whilst on the contrary, should *spectra* be seen, with the marvellous-faculty, it mattered not what might be the disturbing cause, the actual existence of such apparitions would be entertained.

We have known cases of the "ghost-seeing" when wide awake, which have been cured by leeches at the front of the forehead, just over the eyebrows,—evidently indicating that they have resulted from a congested state of the perceptive faculties.

We will now conclude with a circumstance which occurred to ourselves, and which is a confirmation of the advantage of knowledge. We were on a visit at N——, in Nottinghamshire, and had dined with a most respectable surgeon, and had taken more wine than usual. It was in the summer time, and the weather very hot and dry, which combined circumstances rendered us feverish and uncomfortable. It was late when we returned to our lodgings, and our sleeping-room was very small and ill-ventilated. We went to bed, but not to sleep, and tossed and tumbled, changing our position every moment, but was too restless to repose; at length we turned towards the window, and perceived between it and the bed there stood a short, thickset, burly figure, with a huge head, staring us in the face. Certainly nothing could appear more real and substantial, and after gazing on this monstrous creature, we put out our hand, when the monster opened his ponderous jaws and bit at us. We tried various experiments with the creature,—such as putting our hand before his face, which seemed to cover part of it. The longer we contemplated it the more palpable was this figure, and the more wrathful were his features. Struck with the apparent reality of the apparition, we mechanically felt our pulse: it was throbbing at a fearful rate; our skin was hot and dry, and the temporal arteries were throbbing at a railway speed. This physical condition had produced the phantom. We then jumped out of bed, when the spectre seemed to be nearer, and of more gigantic proportions. We then threw open the window to admit a little air, sponged our head and body, and thus, by removing the cause, the monster disappeared. Was not this a waking-dream? and is not the fact a perfect demonstration that, in this instance, a knowledge of the cause was more than "half" the cure.

We may now remark, in conclusion, that however varied the phenomena which have been treated, it will be obvious that in dreams and in spectre-seeing there is invariably some disturbance of the material organization, by which the mind acts in this life; and that all the means which are used to lessen undue action on any of the organs of vegetative life, will produce

similar advantages when applied to lessen any abnormal condition of the brain, unless there exists a lesion of this important instrument.

Thus we have shown that spectres or apparitions are similar to the visions in sleep; that in both kinds of phenomena there is an involuntary activity of the perceptive faculties; and that, therefore, though apparitions under such conditions are real objects, from exalted or diseased perceptions, they should not be regarded as objects of terror, but simply as unmistakable indications of some disturbed cerebral action, and that it would be wise in such cases to apply for medical advice.

Lastly, we may observe that in examination of dreams and of spectral illusions, we have restricted our investigations to such data as are within the range of physiological science. In doing so, we do not deny the truth of prophetic visions, but refer them to another kind of evidence, an evidence which it is not the province of a psychological journal to discuss, and, therefore, has not formed any part of this sketch of a complex but interesting inquiry.

ART. VI.—PSYCHOLOGY OF SPINOZA.*

BY PROFESSOR HOPPUS, LL.D.

BENEDICT DE SPINOZA, whose place in the development of Cartesianism is usually assigned next to Malebranche, was born of Jewish parents, at Amsterdam, in 1632. He devoted himself, at an early period of his life, in recluse solitude, to the reading of the Old Testament, and the Talmud; and he deeply studied the Cabbala, or esoteric philosophy and criticism of the Rabbis; but he soon shocked his friends by the novelty and boldness of his speculations. He was summoned before the heads of the synagogue, and on their failing to convince him that he was in error, he was ordered to leave the assembly. He now cultivated the society of some Christians, and professed to prefer their creed to Judaism. Van den Ende, a physician, who taught him Greek and Latin, had a daughter who was an excellent musician, and appears also to have been a learned young lady, for she greatly assisted Spinoza in his studies. Unfortunately, she taught him, at the same time, Latin and something more; for she unconsciously inspired an ardent passion to which she did not respond; and she soon yielded to the more attractive suit of a wealthy young merchant from Hamburg, carried on with pearl necklaces, rings, and other ornaments. Spinoza, like a true philosopher, consoled himself by study; and, henceforth, according

* *Benedicti de Spinoza Opera quæ supersunt omnia.* Ed. C. H. Bruder.

to his biographer, devoted himself wholly to the cultivation of his mind, and remained unmarried to his death.* The Latin which he had learned was useful to him, as he wrote his works in this language, in a condensed and energetic, though by no means an elegant style.

After relinquishing theology, having met with the works of Descartes, he read them with avidity, adopted the general method of their author, and ever after acknowledged his obligation to him for all he knew of philosophy. He now ceased all connexion with the Jews, his former co-religionists, and never more set foot in the synagogue. It has, indeed, been asserted, that he formally adopted the Christian faith; but this statement appears to have no foundation in truth. He held many conversations with learned Menuonites, and with other intelligent men of various Christian communions, and he changed his name from *Baruch* to its Latin synonyme *Benedict*; but he never joined any other religious profession, after his secession from his paternal faith, though he sometimes attended the Lutheran worship, and highly valued good sermons. His renunciation of Judaism so alarmed the Rabbis, who feared the effect of his example, that they offered him a pension of a thousand florins if he would only consent to attend the synagogue, as before—being willing apparently to connive at his heterodoxy, if he would but pay this hollow compliment to their faith. Spinoza received the proposal with scorn, indignantly declaring that he would not frequent the synagogue again, “if the pension were tenfold” the proffered amount.

He had now produced a feeling which nearly proved fatal to his life. One evening, as he was passing by the old Portuguese synagogue, in Amsterdam, he received the thrust of a poniard, which, fortunately, did him no mischief; but, finding himself no longer safe in the city, he retired to some distance in the country. He was now publicly charged with abandoning Judaism, and was solemnly anathematized with the most awful ceremonies. Before the assembled synagogue, a vast number of candles made of black wax were lighted, the tabernacle containing the books of the law was opened, the officiating minister on an elevated seat uttered, in a doleful tone, the solemn curse; while the sound of the trumpet† gave effect to the extraordinary scene. The candles were then gradually extinguished in a large

* *Vide* Boullanvilliers.

† Salomon Maimon was threatened with the Shofar (trumpet) at Altona; and on his saying that it was a mere buckshorn, the Rabbi fell to the ground with horror. “Der Rabbi zeigte ihm den Schofar, mit den finstern Worten; ‘weisst du was das ist?’” Als aber der Schüler Kants sehr gelassen antwortete, ‘es ist das Horn eines Bockes,’ da fiel der Rabbi rücklings zu Boden vor Entsetzen.” *Der Salon*, von H. Heine. 2ter Band. s. 115.

tub filled with blood ; and, finally, the whole assembly, inspired with horror and execration, re-echoed the deep "Amen."

Notwithstanding the tendency of his system, Spinoza appears to have been a man of blameless morals, both at the time of his excommunication, and during his subsequent career. In the failure of all his prospects in life, he betook himself to the art of polishing glasses for telescopes, microscopes, and other optical instruments. His fame, as a clever optician, even reached the ears of Leibnitz, who wrote to him in consequence. In this way Spinoza gained a very humble subsistence ; but, as his wants were few, he found it enough. In his twenty-eighth year, he retired to Rheinsburg near Leyden, where he pursued his trade as an optician, and continued his studies.

The extraordinary sensation which the writings of Descartes had made in the reading world caused frequent discussions and disputes ; and, at the earnest request of his friends, Spinoza resolved to write on the new philosophy. In 1663, he published, at Amsterdam, *Renati Descartes Principia Philosophiæ*, with an Appendix on his *Meditationes* ; in which work he abridged the speculations of Descartes in an accurate and intelligible manner, so that no better digest of the original Cartesianism is anywhere to be met with. We have here, also, the germs of Spinoza's posthumous work, entitled *Ethica* ; and, indeed, the principal points of his peculiar system. The impression made by this book was anything but favourable to the author's reputation among his opponents, much as it raised him in the estimation of his friends ; and he now retreated to Voorburgh, near the Hague. All admitted his great ability, but many of the admirers of Descartes were annoyed at some of his criticisms on their master's opinions. He afterwards went to live at the Hague ; and here he was in no little danger from the popular displeasure, as he was foolishly suspected of being a spy, at the time of the invasion of Holland by the French. About this period of his life many traits of disinterestedness and generosity occur. He refused to be made heir to a considerable property, because he thought it unjust to the relatives of the testator ; he gave up to his sisters his own portion of his paternal estate ; and he declined the offer of a pension made to him by the Prince de Condé, on condition that he would dedicate one of his works to Louis XIV., saying that he was "indebted to no one but to God." Some of the anecdotes of his Spartan abstemiousness and superiority to animal indulgence are curious. According to his account-books, his dinner one day cost him about two-pence farthing ; but, on another day, having indulged himself with a few raisins extra, it amounted to the sum of two-pence halfpenny !

Spinoza's second work, and the only other published in his lifetime, came out at Hamburgh, in 1670, entitled *Tractatus Theologico-Politicus*. This is a treatise on the relation between religion and politics. In this book he boldly endeavoured to emancipate human thought from the yoke of authority, and strenuously advocated the doctrine which has since been called the "right of private judgment." He maintained freedom of religious opinions, though by a sort of Hobbism, he invested the sovereign with powers incompatible with such liberty; and he says that no religion is obligatory, excepting so far as it has the sanction of the Government, for "it is by princes that God reigns on the earth." He maintains that the State ought, compulsorily, to regulate the form and observances of the Church, though under an outward uniformity all sorts of creeds should be admitted. He deprecated all political changes, and holds that every nation ought to maintain the form of government which it has been used to. Some of the advice he elsewhere gives to rulers in reference to the consolidation of their power, is more worthy of the satrap of an Oriental Monarch than of a philosopher, and seems quite at variance with his own mild and gentle character.* In his bold theological speculations, he anticipated much of the rationalism which has prevailed in Germany since the latter part of the last century. Not only has his general system proved the seed of the varying pantheisms which have marked the speculative philosophy of the Germans, since the sceptre passed from the hands of Kant; but his rationalism, as has been remarked by one of his recent biographers, has even "anticipated the Hegelian Christology, which, in the hands of Strauss, Feuerbach, and Bruno Bauer, has made so much noise in the theological world."†

In 1673, the Elector Palatine offered to Spinoza the chair of philosophy at Heidelberg; but he declined it, on the ground that he should not be able to avoid causing religious controversy by his lectures. It took many years before the Christian faith was so undermined in Germany, that the University of Heidelberg was prepared for the teaching of Paulus. For more than twenty years Spinoza had shown a tendency to consumption; of which disease he died, at the Hague, in 1677, in his 45th year. The amiableness of his character, and the care he sometimes took to encourage religious observances and feelings in others, appeared

* *Tractatus Politicus*, cap. xviii.

† "Biographical History of Philosophy," by G. H. Lewes. Vol. III. p. 125.

In a letter to Oldenburg, Spinoza says:—"Dico ad salutem non esse omnino necesse Christum secundum carnem noscere; sed de æterno illo filio Dei, hoc est, Dei æternâ sapientiâ, quæ sese in omnibus rebus, et maximè in mente humanâ, et omnium maximè in Christo Jesu manifestavit, longe aliter sentiendum." *Opera Posthuma*, Spin. p. 450. *Ibid.*

remarkable, considering the usually admitted tendency of his philosophical system. He taught children the external duties of religion; questioned his host and hostess respecting the edification they had derived from the sermons they heard; and, on the last day of his life, which was Sunday, he would not allow them to be absent from church on account of his illness. Even those who most revolted from his speculations, allowed that he was distinguished for his temperance, quietness, and blameless conduct. He sometimes remained in doors for months together, diligently employed in writing, and in making lenses. His chief recreation is said to have been smoking his pipe, and watching the contests of spiders with flies, and among themselves—an amusement which, oddly enough, so tickled his fancy, that it often made him laugh till the tears rolled down his cheeks.

The different estimates which have been formed of the opinions of Spinoza, appear to have arisen not only from the previous system, philosophical and theological, of the readers of his works, but in a considerable measure from the obscurity which not unfrequently attaches to his language. Compare many parts of his "Treatise on the Improvement of the Understanding,"* with Descartes' "Meditations," or his "Discourse on Method," and we soon find a difference in practical clearness, though we recognise the like simplicity of aim in seeking for truth. Voltaire says:—"You are very confused, Benedict Spinoza, but are you as dangerous as they say? I think not; and my reason is that you are very perplexed; you have written in bad Latin, and there are not ten persons in all Europe who will read you from end to end. When is an author dangerous? When he is read by the idle of the court, and by women."† It would be difficult to find a more candid or enlightened critic than Jouffroy, one more competent or more disposed to do justice. He says:—"that there is nothing contradictory in the system itself, is not my opinion. I am obliged to confess that, after the most attentive study I have been able to give it, there are several portions of the system which still leave me in doubt."‡ Every one who has seriously sat down to read Spinoza's works must have felt inclined to sympathize with this statement of the talented and laborious philosopher, who, during his short life, was one of the greatest ornaments of the French Eclectic School, by no means inferior, as seems to us, to the founder himself. Another reason of the different estimates which have been made of Spinoza's opinions,

* De Emendatione Intellectus.

† Encyclopédie Française. Art. "Dieu."

‡ Lectures on Ethics: a translation from the French, by G. Ripley.—This is one of the most detailed and luminous accounts of Spinoza's opinions that we have met with. The only thing which deteriorates from its value is, that it does not contain quotations.

may arise from the fact of some of his readers having derived their knowledge of them from the works published in his lifetime, in which they were not fully developed, and others from his great work, the *Ethica*, which, as we have remarked, was posthumous. The opposition which he had to encounter induced him, sometimes, to endeavour in some measure to accommodate himself to existing opinions, as appears in his *Tractatus Theologico-Politicus*, and in his correspondence. It is to the *Ethica* that we must look for the detailed exposition of his matured views. This is his most important posthumous work. The others, all of which are unfinished, are *De Intellectus Emendatione*; *Tractatus Politicus*; and a *Hebrew Grammar*. His *Letters and Answers*, also, were published after his death. In the work entitled *Ethica more geometrico demonstrata*, we find Spinoza's system fully developed in a learned and elaborate attempt to prove the existence of the Deity as the sole being in the universe. This treatise is written in a strictly geometrical form, and its author has, on this account, been called the "Euclid of metaphysicians;" but the brief, rigid, and mathematical way in which he has chained his doctrines together, is not exactly adapted to the greatest clearness on a subject so far removed from geometry. His fragment above-named, on the Improvement of the Intellectual Faculty, though not published till after his death, was an early production of his pen. It was intended as an introduction to the discovery of truth; and it is evident, from his notes to the work, which are numerous, that the author contemplated a lengthened treatise, though we have only a tract of thirty-six pages, with his editor's remark, *Reliqua desiderantur*. This work was designed to lay the foundation of a true method of philosophy, in a criticism of the facts of consciousness. He first inquires into the nature of *good*. He concludes, from observation, that the things which men in general regard as constituting the *summum bonum* may be reduced to three—wealth, honour, and pleasure—all of which distract the mind from the true good. That is true good which leads towards perfection. The *summum bonum* is to reach this perfection; and it consists in the cognition of the union which the mind has with all nature. Here we see the germ of Spinoza's future pantheistic development. In order to lead society in general to this perfection, he relies on moral philosophy, education, medicine, mechanic art, and above all on some remedy for the mind (*modus medendi intellectum*), in order that it may be purified from error, and attain to truth. This end is to be promoted by philosophers always speaking popularly (*ad captum vulgi*), by encouraging a sanitary temperance, and a very moderate pursuit of wealth and all bodily good.

There are, according to our author, four modes of knowing (*modi percipiendi*): by hearing or perceiving any sign, which includes testimony; by general experience (*experientia vaga*); e. g., "that oil nourishes flame;" by inference (*ubi essentia rei ex aliâ re concluditur*), as when, from our sensations, we infer that the soul is united to the body; and by essential cognition (*ubi res percipitur per solam sui essentiam*): as, for instance, "by actual knowledge, I know what knowing is;" or when I perceive that "two and three are five," or "that parallels to a third line are parallel." The best method of knowing is attained by a strict acquaintance with our own nature and faculties; by carefully noting the differences, agreements, and oppositions of things, and what are their properties, and what not; and by ascertaining the limit of man's power to reach perfect knowledge. True ideas are the mind's instruments. The intellect by its native energy forms to itself these ideas. Indeed, like some schools of the later Germans, Spinoza supposed the mind capable of grasping the essential nature of things by its ideas, coming face to face with *being* itself, by means of an intellectual intuition—an exaggeration this, of Descartes' appeal to consciousness and its "clear ideas." Leibnitz was far from being wrong in calling Spinoza's philosophy *un Cartésianisme outré*; it is so even in some of its elementary positions.* Our author next treats of fictitious, false, and doubtful ideas, which may float in the imagination or the memory, in distinction from ideas which are true and adequate, as being the ideas of the reason. In pursuing his method, he next discusses the conditions of definition. If the thing to be defined is a created thing, the definition must comprehend the proximate cause—e. g., a circle is defined, "a figure which is described with any line one extremity of which is fixed, the other moveable"—the circle is the result of the conditions. Again, a conception or a definition of a thing requires that all the properties of the thing may be concluded from what is stated of it. Thus the equality of the radii, and all other properties, are determined by the construction, which, as above, defines the circle. The definition of an uncreated thing involves the conditions—that it requires no object beyond itself for its explication; that its definition includes its existence; that it is not explicable by any abstract ideas; that all its properties should follow from the definition. Spinoza adds that a definition, in order to be called perfect, must explain the intimate

* Spinoza said, "Certainty is nothing but the objective essence itself of the object. The true idea of Peter is the objective essence of Peter. So that, in order to arrive at certain knowledge, we want nothing but the true idea. We reach the highest certainty when we have the adequate idea or objective essence of anything; that is to say, certainty and the objective essence are the same thing." *De Emend. Intell. vi.* We have here an *Identitäts-lehre* by anticipation.

essence of the thing, and must avoid employing properties as a substitute for this: thus, he says, we are not unfolding the essence of the circle when we say the radii are all equal, but only naming a property. The author closes his fragment by treating of the powers and properties of the intellect. It certainly knows things *as they are*. It can form ideas absolutely; and it can deduce them from others. The ideas which it forms absolutely express infinity, which is necessary to the idea of the finite. Positive ideas are formed before negative ones. Clear and distinct ideas so arise from the laws of our nature, that they *seem* to depend on our own power. From this brief sketch of the contents of the work *De Intellectus Emendatione*, the reader may in some measure judge of Spinoza's method; and if he reads this brief treatise for himself, he will perhaps find that it is not always very lucid. We certainly miss very often, in the pages of Spinoza, the perspicuity and clearness of his master Descartes, with whom we are far enough from always agreeing; but we certainly less frequently find him obscure.

In the *Tractatus Politicus*, which Spinoza wrote shortly before he died, we meet with clear trains of thought, and a luminous style. He treats of polity in general; and of monarchy, aristocracy, and democracy, as forms of government. In respect to the limit and functions of the ruling power, as regards the relation of academical education to the state, he reminds us of Adam Smith. He objects to endowments, as calculated to repress rather than to foster genius; and he holds that science can only flourish by its teachers relying entirely on their own resources, and earned emoluments. We are disposed to think that if Spinoza had lived in England, in the nineteenth century, he would have been obliged to acknowledge that his theory on this subject required a little revision, however disposed he was to content himself with Spartan fare and "single blessedness."

Though his method of seeking truth was so much that of Descartes, he soon regarded the method as capable of a more extended development, landing in very different results. In one of his letters,* in answer to the inquiry—what is the best mode of advancing with certainty in the road to the knowledge of things? Spinoza replies (agreeably to the main principles of his Treatise on the Intellect),† that "the best method is that in which we can direct and chain together our clear and distinct perceptions (ideas); for the intellect is not, like the body, liable to vary with circumstances (*casibus obnoxius*), on this account alone—namely, that one of these clear and distinct perceptions, or several together, are adapted to be absolutely the cause of another clear and distinct perception; nay, all our clear and distinct percep-

* Epist. xlii.

† De Intellectus Emendatione.

tions cannot arise otherwise than from other clear and distinct perceptions which are in us, and which admit no other cause out of ourselves.* Hence it evidently appears what ought to be the true method, and in what it chiefly consists—namely, in the simple cognition of pure intellect (*in solâ puri intellectus cognitione*), and in its nature and laws; and in order that this method may be acquired, it is necessary above all things to distinguish between intellect and imagination, or between true ideas and others—that is, those which are fictitious, false, and doubtful, and absolutely all which depend on memory alone.†

It appears from these statements that Spinoza agreed with Descartes as to the importance to be attached to “clear and distinct ideas and perceptions,” as the basis of real knowledge; though these ideas and perceptions led him away from the dualism of his predecessor (who believed in two sorts of substances, matter and mind) to the dogma that there is no real being in the universe but the τὸ ἐν καὶ τὸ πᾶν. This theory of ideas and their validity has been more or less elaborated by Descartes and Leibnitz, as well as Spinoza, and we may add Malebranche, but especially by the three former; for Malebranche’s main stand-point, the theosophic vision, tended to shorten the process of testing the psychological subjectivity of our ideas. With Descartes, Spinoza made it a principle to admit nothing as true, the grounds of which he did suppose himself distinctly to recognise. But he carried his theory farther; he said, not only is everything true that we clearly and distinctly cogitate, but every true idea is also *adequate*, that is, it agrees perfectly with its object, and the more perfect the object, the more perfect is the idea. This axiom, that the true idea, or real knowledge, must wholly agree with its object—must seize, as it were, upon the very essence of that object, lies at the foundation of all Spinoza’s axioms and first principles. They are to be seen and known to be true by an *intellectual intuition*. Like Descartes, therefore, Spinoza appealed to consciousness giving a clear and distinct testimony, as the final criterion of truth: our clear and distinct ideas and perceptions, as being freed from all uncertainty, are expressions of what truly and really is. But it is instructive to reflect to what different results this theory of *ideas*, so similarly treated by Descartes, Spinoza, and Leibnitz, conducted these several renowned philosophers. Descartes and Leibnitz, it must be admitted, signally departed from their own rules as soon as they advanced beyond the threshold of their speculations, and gave to the world some most gratuitous theories; and if Spinoza was more consequent, more consistent throughout with the principles he first laid down, he was, never-

* Quod quidem ex hoc solo constat, etc. Epistol. xlii.

† Ibid.

theless, led to conclusions which seem to offer, in some respects, still greater violence to reason! Surely these "clear and distinct ideas" require to be scrutinized with some jealousy, and guarded with more practical care from the intrusions of imagination, than we find exemplified in much of the philosophy of either of these celebrated men.

Considering that Spinoza was a Cartesian as to his adoption of the mathematical or deductive method, which he followed much more rigorously and formally than Descartes himself, and that he was altogether of the *à priori* school of philosophers, it is the more to be noted that he should find any distinct point of coincidence between his own notions of psychological speculation and those of Lord Bacon, whom he criticises in his Correspondence as not only having erred widely, along with Descartes, "from the true knowledge of the first cause and origin of all things," but also as "not having known the true nature of the human mind," and as "never having reached the true cause of errors," because they failed of a right estimation of "*ideas*" as leading to knowledge. Yet, with Bacon, he described the line of speculation he proposed to follow as being independent of any theory of the nature of mind itself. The Baconian principle, as exemplified by Bacon and the metaphysicians of his school, was to seek for properties and phenomena only, since natures and essences are beyond our ken; and Spinoza himself says that, for the purpose of distinguishing the pure cognitions of the intellect from the ideas of mere imagination and memory, "we need not know what the mind is in its cause," but only digest the history of its perceptions according to Lord Bacon's method; (*more illo quo Verulamius docet.*)

The main problem which Spinoza proposed to himself may be stated as follows:—Given the notion of substance, as it is conceived by reason, and expressed by a proper definition—to derive from this notion all that is involved in it, by a rigorous deduction, apart from experience; and then, having obtained such logical deduction, to put it in the place of the universe of being. With this aim, Spinoza adopted as much as possible the procedure of the geometrician, endeavouring to apply it to his metaphysics of matter and of mind. The fundamental idea of the geometer is the abstract notion of space; the fundamental idea of the philosopher, according to Spinoza, is to be that of *substance*. As clear and distinct ideas, supposed to be attained, lie at the basis of his theory of knowledge—so the idea of substance, which is said to be one of them, is the corner-stone of his metaphysical, cosmological, and theological system. The reader will judge for himself, as we advance, to what extent the whole fabric of Spinozism is built upon ambiguities and assumptions, sincerely as Spinoza himself believed that all was irrefragable.

He gave the name *Ethica* to the work which developes his main doctrine, because he regarded the whole of true philosophy as closely identified with human virtue; and virtue, as being in its principle the love of God, must have its origin in the true knowledge of him.* The first book of the *Ethica* is entitled *De Deo sive Infinito*. The second *De Naturâ et Origine Mentis, seu de Finito*, deduces from the previous idea of God that which we should form respecting man as a thinking being. The third is *De Naturâ et Origine Affectuum*, or the sources and mechanism of the passions, a topic which he regards as involving all the phenomena of man. The fourth is *De Servitute Humanâ, seu de Affectuum Viribus*; and here the author endeavours to show that there is a necessary order of development in human nature, and that the will also is under necessity. The fifth and last book is entitled *De Potentiâ Intellectus, seu de Libertate Humanâ*, in which he proposes to show the nature and operation of free-will.

The work sets out with eight definitions:—I. Cause of itself (*causa sui*) is that, the essence of which involves existence; or that, the nature of which cannot be conceived of but as existing. The idea here evidently is that of necessary and self-existence. II. The *Finite* is that which can be limited or bounded by another thing of the same nature. In this way body and thought may be limited, though not by each other. III. *Substance* is that which is self-contained, and is conceived of *per se*; or that, the conception of which does not require to be formed from the conception of anything else. IV. *Attribute* is that which the understanding perceives as constituting the very essence of substance. V. *Modes* are the affections of substance, by means of which we can conceive of it. VI. *God* is a Being absolutely infinite, the substance which consists of infinite attributes, each of which indicates an infinite and eternal essence. VII. That is said to be *free*, which exists solely by the necessity of its nature, and which is determined to action by itself alone. That is *necessary*, or constrained, which owes its existence to something else, and which acts from certain and determinate causes. VIII. *Eternity* is existence itself, so far as it is conceived necessarily to follow from the mere definition of an eternal thing.—It is evident that the scholastic way in which these definitions are expressed, is in itself sufficient to throw over them a certain air of obscurity. Their meaning, however, is perhaps for the most part sufficiently intelligible; and if the wording of some of them may be questioned—after all, definitions do not prove anything, and an author may be allowed to abide by his own.

Seven axioms follow. I. Everything which exists, exists either in itself or in something else. II. Whatever cannot be conceived

* Amor Dei non nisi ex cognitione ejus oritur. Tractat. Theol. Pol. IV. 42.

of through another thing (*per aliud*) must be conceived of *per se*. III. From the cause, the effect necessarily follows; and there can be no effect without its cause. IV. Knowledge of the effect depends on knowledge of the cause, and involves it. V. Things having nothing mutually or in common, cannot be understood through each other; that is, the conception of the one does not involve the conception of the other. VI. A true idea must agree with its prototype, or representative in nature (*cum suo ideato*). VII. Whatever can be conceived of as non-existent, does not involve existence in its essence.—These axioms may, with little difficulty, be admitted. The first means that everything must be either self-existent or not. The fourth has been much condemned: among others, by Mr. Hallam, who thinks that this axiom is the seat of a fundamental fallacy, and remarks that “the relation between a cause and effect is surely something different from our perfect comprehension of it, or, indeed, from our having any knowledge of it at all; much less can the contrary assertion be deemed axiomatic.”* Mr. Lewes, on the contrary, defends the axiom as true according to the Spinozistic sense of it. It is not meant that no effects are manifested to us, of which we do not also know the causes; but that a complete knowledge of the effect can only be had through a complete knowledge of the cause. “If you would know the effect in its totality, you must also know the cause in its totality. The antecedent was once only a sequent to its cause. To penetrate the mystery, you must know *what* the effect is, and *how* it is; you must know its point of departure and its point of destination.”† We have little doubt that the above remarks furnish the proper clue to Spinoza’s meaning.—In order to illustrate the manner in which he applies his definitions and axioms to prove his doctrines, we will introduce a few examples from his propositions:

I. Substance is prior in nature to its affections or accidents: Def. 3 and 5.

II. Two substances with different attributes have nothing in common with each other: Def. 3.

III. Of things having nothing in common, one cannot be the cause of the other:‡ Axiom 5; Axiom 4.

IV. Two or more different things are distinguished from each other, either by the diversity of their attributes or by that of their modes (*affectionum*): Axiom 1; Def. 3 and 5; Def. 4.

* Lit. of Europe, vol. iv. p. 246.

† Biog. Hist. of Philosophy, vol. iii. p. 135.

‡ This proposition is the old Greek fallacy, “like cannot act on or produce unlike;” which daily experience contradicts, for our sensations do not resemble outward objects which produce them; but the principle favoured Spinoza’s theory, that there is only one substance in the universe.

V. In the nature of things, there cannot be two or more substances of the same nature or of the same attribute: Prop. IV., Def. 3 and 6.

VI. One substance cannot be produced by another substance; (Prop. V. II. III.; Corollary 1). It follows that substance cannot be produced by anything else, (Axiom 1; Def. 3 and 5; Corollary 2). The contradictory of this proposition is absurd; Axiom 4; Def. 3.

VII. It belongs to the very nature of substance to exist: Coroll. to Prop. VI., and Def. 1.

VIII. All substance is necessarily infinite: Def. 2; Prop. V. Scholium 1. It follows alone, from proposition VII., that all substance must be infinite: Scholium 2.—Here Spinoza anticipates objections to Prop. VII.; but there would be no difficulty, he says, if men did not confound the divine with the human—if they would only understand by substance that which exists in itself—that, the knowledge of which does not require the knowledge of anything antecedent; in short, if they would only attend to the Definitions and Axioms, they would then be convinced that the existence of substance is an eternal truth, and that only one substance of the same nature can exist.

We have now given a sufficient specimen of our author's method in the *Ethica*. In a similar way he treats all his propositions, adding their demonstrations, which we have only indicated, for want of space.* The whole work is digested in the most rigid order, each new theorem depending on the definitions, axioms, and preceding propositions, and each demonstration meriting, as the author believed, the triumphant attestation of the three letters, Q. E. D. Whoever sits down seriously to study these pages of Spinoza, will indeed find that they require even a more wakeful and painstaking attention than a book of geometry; for in these abstract metaphysics we can have no aid from diagrams—to say nothing of the entire conviction which attends every link of a chain of geometrical demonstration.

We will now proceed to some further development of Spinoza's system, keeping as nearly as may be to his own expressions. God is the one infinite substance, holding potentially, in his own self-existent being, the whole universe. He is *causa sui*—that is, "his essence involves his existence;" for a cause of or in itself is that, the nature of which cannot but be conceived of as existing.† This *causa sui* is, therefore, the *sole substance*, or that existence which is in itself, and is conceived of by means of itself, since the conception or notion of it does not require any other conception from which it must be framed. It is the abso-

* For the same reason we have not quoted long extracts from the original Latin.

† Eth. Part. I. Def. I.

lute, the independent, the highest and only reality. Of course there can be but one such substance, and it is necessary and infinite;* nor can we imagine another to produce it. We must not understand our author, therefore, to use the term "substance" in the ordinary sense. According to him, matter or body is only one mode in which the Deity is manifested. Both matter and spirits are nothing but manifestations of Him, the one and only real substance; for all else is finite, and dependent on His being.

Attribute is "that which our intellect perceives to constitute the essence of substance;" and modes are the affections of substance, by which the attributes are manifested in something else, through which manifestation the mode is conceived of.† The formal definition given of the Deity is: "the Being absolutely infinite, or the Substance consisting of (*constantem ex*) infinite attributes, every one of which expresses an eternal and infinite essence." This substance exists necessarily, and is "absolute affirmation," one and indivisible. Extended existence and thinking existence are not two different substances, but only attributes, or modifications of the attributes of the one divine substance,‡ in which all things exist, apart from which nothing can be conceived of, and to the necessary activity of which they all owe their origin.§ And as the Deity is constrained by the laws of His own nature alone, He is the *immanent* but not the *transient* cause of all things; that is, all finite things are but the necessary emanation of the divine nature, and not productions created in time, and dependent on single acts.|| Nothing, therefore, is contingent; all is eternally determined by the necessary laws of the divine substance. Hence God is *natura naturans*,—an expression used by Bacon in reference to the supposed forms or essences of matter, but which Spinoza uses to signify the Deity in respect to His being regarded as a free cause (*quatenus ut causa libera consideratur*). The term *natura naturata* is applied to all things as existing in the Divine Being, since they flow from the very necessity of his nature, and are but modes of his attri-

* Ibid. Def. V. Prop. VI., VIII. This is very like some statements of Descartes, and might well be developed from them. He says (*Principia*, Part. I. 51), "that which truly exists is substance, or that which requires no other thing to its existence. There can be but one such being, namely, God; all other things only exist by his co-operation. Hence the name *substance* does not univocally belong to him and to them."

† Ibid. Def. IV.

‡ Vel attributa vel affectiones attributorum. Vide Prop. VIII. Schol. 1. Prop. XIII. Schol. Prop. XIV. Corol. 1. Descartes said that the essence of matter is extension; Spinoza ascribes to matter infinity, necessity, unity, and indivisibility. Prop. XV. Schol. He also says, consistently with this, that if any one part of matter were annihilated, all extension would vanish with it. Epist. IV. ad Henr. Oldenburgh.

§ Prop. XV., XVI.

|| Prop. XVIII., XXV.

butes.* For while God is spoken of as a “free cause,” this only means that we are wont to regard him as such: the system denies the Divine freedom, in any other sense than that of unlimited natural power, or the absence of obstruction or constraint: God does not act from liberty of will: things could not have been made by him otherwise than they are. Our author goes on to identify as one the divine intellect, will, and power, saying that they are “essentially one and the same thing.” As to intentional motive principles, or final causes, these are denied. The Deity does not act on the principle of *what is good* (*sub ratione boni*); for, if so, “there would be something good beyond Himself, and not dependent on him—something for Him to copy from or aim at.” He acts without any such impulse, and simply by the mere necessity of His own energy and power. This very power is His “essence,” by which Himself and all things are and act; for by the necessity of His essence He is cause of Himself and of all things (*causa sui et omnium rerum*).†

Spinoza next treats of the ideas which the human mind should form respecting itself as well as of all finite things. All is to be identified with the one and only substance, as being the same with it (*imo una et eadem substantia est*), sometimes comprehended under one, sometimes under another attribute. Thus the “mode” of extension, and an idea of that mode, are but one thing expressed in two ways: a circle existing in nature, and the idea of it, are one and the same thing developed by means of different attributes.‡ Things and the ideas of things are equally the necessary result of the same order and connexion. Things come of necessity from the Divine existence; ideas come from the Divine thought. God is the cause of every idea of a finite mind,—not merely as origin and container of all things, but also in so far as His infinite understanding is considered as modified by the idea of a particular finite being (*quatenus alia rei singularis idea affectus*).§ “Hence it follows that the essence of man is constituted by certain modifications of the attributes of God; for there is something in that essence which is in God, and which cannot even be conceived of without him.”—“The essence of man, therefore, is an affection or mode which, in a determinate manner, expresses the nature of God.”||—“It follows that the human mind is a part of the Divine intellect (*partem esse divini*

* Prop. XXIX. Schol.

† Vide Ibid. Prop. XXXII. Corol. 1. Prop. XXXIII., XVII. Schol. Prop. XXXIV.

‡ This, in the original, might seem Malebranchianism, did we not know how much more it meant *Circulus in natura, et idea circuli, quæ etiam in Deo est.*

Eth. Part. II. Prop. VII. Schol.

§ Prop. VIII. and IX.—Ibid.

|| Ibid. Prop. X Cor.

intellectus); and when we say that the human mind *perceives* this or that, we say, in short, that God has this or that idea—not in respect that He is infinite, but so far as He is developed through the nature of the human mind, and constitutes its essence.”* Again: agreeably to the general theory, (according to which infinite extension and infinite thought belong to the one universal Being), the body and the mind of man, being only modes or finite determinations of the infinite development of God, are one and the same thing, conceived of sometimes under the mode of extension, sometimes under that of thought.† This doctrine of identity is evidently cosmothetic idealism—and not like materialistic pantheism, ancient or modern.

As to those ideas of the mind which are the final vouchers for truth, Spinoza compares them with the ideas of God. Now, “all the ideas which are in God are true, for they all agree, altogether, and adequately with their objects: so every idea in ourselves, which is absolute or adequate, is true.” But when the mind is only determined, accidentally, to contemplate a thing, independently of the inward bond which that object has to the universal Being, a confused idea is the result. Every error arises from inadequate ideas of the imagination; but the *reason* always gives adequate ideas, and is always true. We always know when we have a true idea, and we cannot doubt of it; for truth is the criterion both of itself and of falsehood. Our cognition of the eternal and infinite essence of the Deity, which every true idea involves, is adequate and perfect. Hence the infinite essence and the eternity of God cannot but be known to all.‡ Truly, if human reason possesses such an intuition, we ought long ago to have mastered all the sciences!

The directly moral part of Spinoza’s system is contained in the three last books of the *Ethica*. His moral philosophy, in which man is viewed in those absolute relations which reason discerns, is pure and elevated, symbolizing with that of the Stoics. Frederic Schlegel, who certainly had no tendency to Spinozism, even estimates his ethics as having a considerable advantage over those of the Porch. Nevertheless, his moral *theory* is sometimes expressed in language which evidently identifies it with the views of the sentimental and utilitarian schools. He regards moral good and evil as “nothing more than our modes of thinking, or the notions that we form;”§ and he expressly makes utility the same thing with goodness.|| His doctrine of human volition amounts to downright fatalism; and the same may be said in

* Ibid. Prop. XI. Cor.

† Ibid. Prop. XXI. Schol.

‡ Vide Ibid. Prop. XXXII., XXXIV., XXIX., XXXIV., XXXV., XLV., XLVI., XLVII.

§ Eth. Part. IV.

|| Per bonum id intelligam quod certo scimus nobis esse utile.—Ibid. Def. I.

regard to his views respecting the Divine will. He holds that "no mind has absolute or free will ;" and that the mind of man is determined to will this or that, by a cause which is again determined by another, and this again by another, and so on *in infinitum*. For as mind is a certain and determinate mode of thinking, it cannot be an absolutely free cause of its own actions. There is, in the mind, no absolute power of understanding, desiring, willing, or the like."* Indeed, will and intellect, says our author, are one and the same thing—"they are identical with singular volitions and ideas—a singular volition and a singular idea are one and the same." And "as thought and will are one, so the knowledge of good and evil are nothing but the affection of joy and sorrow, when we are conscious to ourselves of the one or the other."†

Every being, says our author, desires, by the necessity of its nature, to continue in the condition for which its nature adapts it. God necessarily exists ; he therefore necessarily desires to remain in existence ; and as this existence is universal and unlimited by any other, he is absolutely happy as he is absolutely perfect. Man, as a development of the Deity, partakes of the desire of God to exist, and to remain in existence. Of the soul of man, knowledge is the main element ; and the desire of continued existence is therefore identified with the desire to extend and increase knowledge. Spinoza characterizes human desire as being this appetency of continued existence as an intelligent being. This desire, however, meets with obstacles, as well as with objects for its gratification. Hence the relation of man's condition (which is variable) to this elementary desire, produces pain or joy, hatred or love, hope or fear. These Spinoza calls *passions* : they are "secondary feelings ;" the desire of continued intelligent existence, alone, is primary and fundamental. Our author's reason given for this distinction is, that the passions or secondary emotions of the mind arise from the agency of external causes, which act on us in a wholly passive state ; while the general and abiding desire of continued intelligent existence is original, innate, and independent of external causes.‡

The above quotations and references will enable the reader to judge of the chief characteristics of Spinozism. Its main drift is to prove that there is, in the universe, but one substance, which is God, endowed with infinite attributes—those best known to us being infinite extension and infinite cogitation. But these two are really one : extension is visible thought, and thought is visible extension ; they are the objective and the subjective, of

* Eth. Part II. Prop. VIII.

† Ibid. Prop. XLIX. Corol. et Scholium finale.

‡ Eth. Part IV.

which God is the identity. All things exist but as modifications of this Divine Substance; apart from him they are nothing. He is their cause, by the eternal necessity of his nature—their cause by dwelling in them, not by creating them as distinct existences from himself; so that, in all events, physical and moral, he is at once cause and effect, agent and patient. Everything termed matter is a mode or manifestation of the Divine attribute of extension; every thought, desire, emotion, volition of man, is a mode or manifestation of the Divine attribute of thought. Descartes, in some places of his works, makes extension and thought identical with material and spiritual substance, respectively: Spinoza says they are attributes of the one only substance, for they exist only *per aliud*, not *per se*. Thought does not think, extension itself is not extended; thought and extension are attributes of the one thinking, extended substance.

There are apparently *three* kinds of existence:—First, attributes, properties, or qualities, and effects or phenomena; but all admit that we can only conceive of these in relation to substances, independently of which they have no existence. Secondly, other things seem more real: man, who has certain properties of body and mind, appears to be a substance; but, as neither minds nor bodies originated without a cause foreign to them, and cannot continue their own existence, their being is only that of accidents—it is not truly real: their independent existence is only apparent. Thirdly, though the above two kinds of existences are all that experience makes known to us, reason can go further—can go beyond derived, accidental, and dependent existence, and can perceive that there must be somewhere a Being whose existence is the essence of the former, and who is self-existent. We now reach the only real Being (*Ens realissimum*), the one only substance; for reason will not allow us to suppose more than one self-existent, invisible Being, containing all existence in himself—in ancient phrase, τὸ ὄν—from whose existence all his infinite attributes necessarily flow.

As there is but one real substance, and as we cannot conceive of substance but as extended, and there is infinite extension in the universe, extension is an infinite attribute of the Infinite Being. Spinoza does not seem to have brought forward any demonstration of the necessity of the attribute of infinite thought, as he has of that of extension, which he considers inseparable from substance. He holds, however, that thought is another infinite attribute of the one substance, agreeably to the ancient doctrine of Parmenides and his school, that thought is only an aspect of τὸ πᾶν or the One-all. Indeed, we find, in the ancient Greek metaphysics, some striking resemblances to the doctrines

of our author ; especially in the opinions of Xenophanes ;* though Spinoza arrived at his conclusions more exclusively by the “high *à priori* road,” than the celebrated chief of the Eleatic school. It does not appear, however, that Spinoza was influenced by any study of the purely Greek philosophy ; but much of his system has a strong resemblance to some of the Cabbalistic dogmas, which were of Pantheistic tendency.

As God is the only substance, it follows that all things must exist in him and through him, as their inherent cause. The whole universe is only a manifestation of his being. If we loosely talk of other beings or substances, all that is or ought to be meant by this language is, that they are *modes* in which his attributes are manifested. According to our author’s doctrine, there is no divine volition in these manifestations. As the ancient Greeks sometimes talked of Jupiter himself being subjected to inexorable fate ; so Spinoza’s God is irrevocably bound by an iron necessity, as a perfection of his nature. He is little else than an infinite, omnipotent machine, acting by laws which are not controlled by anything that can in strictness be termed wisdom ; for wisdom implies intelligent choice and freedom ; but in this system no room is left for such a moral power. Spinoza ridicules the notion commonly entertained, that the Deity wills and acts for a certain end, as though it were possible for him to prefer some other end, or any end at all. All his actions are rigidly determined by the laws of his own nature ; and free-will, in the moral sense, is not one of them. All we know of God is his thought, and his extension ; we cannot attribute *will* to him, as separate from thought, and as capable of a varying determination. Not that it is denied, in terms, that God is free—nay, he is the only free agent ; but his free agency consists only in this, that he is free from being influenced to act by any other nature or power than his own. Man’s acts depend on his circumstances, on the will of others, and ultimately like all other agencies they must be traced back to God : man, therefore, is not a free agent, because dependent. God is free from dependency on any other being ; but he wills not from design, and has no passion or disposition analogous to man’s. His will is a mere spontaneity of his nature ; all is unchanging, unalterable, eternal necessity. So far as intelligent freedom is concerned, an automaton chess-player would represent Spinoza’s God.

It is remarkable that while he strenuously maintains that all finite existences and their acts are the natural and inevitable expression of the necessary laws of the divine nature—only so many phenomena of deity, he, nevertheless, energetically repels

* Who was described as “lost in the One-all,” (εἰς ἓν ταῦτό τε πᾶν ἀνελύτο). *Vide* Sextus Empiricus ; *Institut. Pyrrhon.* I.

the allegation that he confounds the universe with God. He denies that it is God; it is a mode in which his attributes are necessarily manifested. God is the eternal living principle of all things; the material world is one phase of his infinite attribute of extension. Now, the modes of manifestation are finite; but the one Substance, or God, is, in all respects, infinite. His attributes, too, are, in themselves, infinite, each in its own way: it is only as being many that they are finite, one limiting another; and each expressing, under one mode only, the Divine essence or existence. But surely the finiteness of the "modes," and the reciprocal limitation of the "attributes" (which latter, in some places, he identifies with modes) do not, in Spinoza's theory, separate them from the "one and only Substance." There is in the system as close an identification of the universe with God as there is, in the current psychology of man, an identification of the separate modifications of consciousness and of the mental faculties with mind itself. An act of remembrance is an affection of mind—the universe, according to Spinozism, is an affection of God. In one place, our philosopher says that all things have the same relation to God, as the property of having the sum of its angles equal to two right angles has to the triangle. This is something more than the old doctrine that "God is the soul of the world." Ideas are termed "modes of thought," and they must have objects. The only object to the Divine thought is the Divine existence or essence, and all that flows from it: he is eternally employed in contemplating himself alone. What God thinks as cogitative, he does as extended, and *vice versâ*. His thought and his act are but one phenomenon under a twofold aspect. The circle is a mode of God as possessing extension; the idea of a circle is the corresponding mode of God as thinking. The Divine Being himself also thinks of his own thoughts, by self-consciousness; and all man's ideas are only determinate portions of the ideas of God. As to finite body and spirit, they are only forms of extension and thought, modes, or (as Spinoza sometimes calls them) "portions" of the Divine extension and the Divine thought. Body and soul appear to be two, but they are not,—they are only two aspects of one thing; aspects of the one substance, in its extension and its thought. As though to mystify the doctrine of finite spirit still further, our author asserts, anticipatorily of some of the modern German speculations, that "the soul is the sum of the ideas which are brought together at any one moment." It is nothing more than a succession of ideas, which are only the result of different changes taking place in the body.

Spinoza assigns to affections of the body all our ideas. "We know our own bodies only by means of their affections, and

external bodies by the affections of our own ; and we know our own spirits only by means of the idea of those affections.”* Nevertheless, all man’s ideas, whether derived or intuitive, are determinate portions of the ideas of the Deity, and are produced by necessity. This statement does not well cohere with another, in which he says that the mind has the power of regulating the ideas which are its constituent elements, and of controlling their development. Here we may observe that there is a considerable discrepancy between the metaphysical and the moral part of the system. In the former, Spinoza speaks the language of necessity and fatalism ; in the latter, he ascribes to man a certain sort of command or influence over his ideas : and he seems to found his whole system of practical morality on the notion of liberty or power exerted by man over his trains of thought. We must not now attempt to dwell further on the extent of this inconsistency.† A similar obscurity is usually admitted to rest on his account of the process by which general ideas are produced from those which are individual.

Notwithstanding the apparent rigour of Spinoza’s deductions, the reader will by this time be prepared to see that their conclusiveness towards establishing the system is in appearance only, not real. Many chasms in reasoning which require to be filled up are leaped over by a bound. The whole is based on gratuitous assumptions and scholastic ambiguities, in regard to the meaning of the terms substance, extension, thought, eternity, intellect, will, etc. As to the definitions and descriptions of the Divine Being, they can hardly be said to designate a really personal God. Great inconsistencies arise, even in the outset, on a comparison of the definitions, axioms, and propositions. “Substance is conceived *per se*, and requires the conception of nothing else, in order to our forming an idea of it ;” and yet “the modes of substance are its affections, by which it is conceived of”—that is, by which we form an idea of it. Again : if “attributes are the essence of substance,” can we conceive of substance in any other way than through its attributes ?—or, would Spinoza say that the attributes are the substance ? If so, why make the distinction ?‡ But we must refer the reader to the first half-dozen pages of the “*Ethica*” for further illustration.§ He will often find that Spinoza, where he seems to prove, is only ringing incessant changes on terms ; and that, although his dogmas bristle with an imposing array of geometrical forms, the remark of M. Saisset, his most recent editor, is true :—“Spinoza

* “*Ethica*.” Part II. † See the remark of Jouffroy ; p. 317.

‡ Def. III., IV., V. “*Ethica*.” Part I.

§ See Def. I., VIII., Comp. Prop. I. and Def. IV. V. ; also Prop. III. and Ax. V. ; also Prop. VII. and Def. VIII.

does not demonstrate his system—he only developes it.” Leibnitz was clearly of the same opinion, and he often condemned the system in strong terms.*

Widely as Spinoza departed from the philosophy of Descartes, it is evident that he was led to his own views by his profound study of the Cartesian principles. Descartes relied on man’s clear and distinct idea of a Perfect Being, as an irrefragable proof that there is one; Spinoza conceived that he had an equally valid idea of his pantheistic substance. Descartes sought to deduce, *à priori*, all the phenomena of nature necessarily from his idea of the nature and attributes of the first cause; Spinoza equally deduced them from his “clear” (intuitive) idea of the one substance. Descartes rejected final causes from philosophy; and Spinoza says they are but human fictions, and laughs at those who imagine that eyes were designed for seeing, or the sun for giving light.† Descartes represented the universe as a machine that might go on for ever, mechanically, the same quantity of motion ever remaining in it; Spinoza represented it as always having (as he inaccurately expresses it) the same proportion of motion to rest in it, and as perpetually moved without a free power, and only by necessary laws.‡ Descartes unguardedly asserted that extension alone constitutes the essence of matter; whence Spinoza saw that it followed that matter must be infinite, eternal, and necessary, since space (its essence) is so. No doubt, however, Descartes would have disowned the inferences which Spinoza so boldly drew from his philosophical principles.§

* Leibnitz was misunderstood by some as leaning to Spinozism. If there were not ample evidence to the contrary running through his works, it would be sufficient to refer to some “Critical Remarks on Spinoza” from his pen, in an original manuscript recently found in the Royal Library at Hanover. The piece is very learned, though somewhat desultory; but it touches on some of the main points of Spinozism. Among other objections, Leibnitz remarks: “Spinoza says the soul may change at any moment, because with the changes of the body there is a different idea of the body, as though the soul were an idea.” “He considers creatures as evanescent modifications.” “Spinoza begins where Descartes left off, in *naturalism*.” “There is a medium between chance and necessity, namely, free will; this Spinoza denies.” “He attributes duration to the soul only during the duration of the body: he thinks the soul perishes with the body.” “He says that memory and imagination disappear with the body.” We hardly think Spinoza would have endorsed this latter statement in full; his idea seems that of a kind of absorption into the One-all, though this said little for the continued personality of man. See “Refutation of Spinoza,” by Leibnitz. Edited by the Rev. O. F. Owen. 1855.

† “Ethica,” Part I., Prop. XXXVI.

‡ Ibid., Part II., Prop. XIII., lem. 3.

§ If matter be infinite and necessary, says Spinoza (and such it must be in his system of the universe and the Deity), then it must be one and indivisible. “This cannot be denied by those who reject the possibility of a *vacuum* (as Descartes did); for if matter could be divided so that its parts should be really distinct, why might not one part be annihilated, the rest remaining connected with each other as before?

The speculations of Spinoza have proved a fertile germ of the Pantheism which has prevailed during the last seventy years, under various and changing phases, among the Germans; sometimes assuming a purely idealistic form, at others involving a naturalism which identified matter and mind as one, and amounted to a species of Spinozism. Hamann, Herder, and Novalis, all tended towards the subsequent views of Schelling. Novalis terms Spinoza "a God-intoxicated man;" and his own speculations were a Spinozism modified by Fichteism. Schelling's "One Absolute" is at one time objective (*natura naturata*), at another subjective (*natura naturans*): this is little else than Spinoza's universal Substance. Schelling relies on *intellectual intuition* as the infallible organ of truth. In the idea of the Absolute, this intuition sees all things—it points them out in the Absolute, and so may be said to construct them; and in so constructing them, the particular is presented under its absolute form, brought back to its eternal idea: so Schelling. Spinoza, in similar language, says:—"The eyes of the mind, by which it sees and takes cognizance of things, are the demonstrations themselves:" (*i.e.*, we suppose intuition is demonstration.) Spinoza adds: "we perceive ourselves, and experience ourselves thus to be eternal."* Among the pantheistic theories of the moderns, that of Schelling, no doubt, most nearly resembles Spinozism; being objective, and maintaining the real existence of the Deity, who is not a mere ideal creation of the *ego*, as in the original "*Ichlehre*" of Fichte, which was an altogether subjective idealistic pantheism. In its earlier form, the philosophy of Schelling† was as completely pantheistic as that of Spinoza, and did not differ from it in any fundamental principle; though in his subsequent developments, Schelling emerged from this absolute Pantheism, and spoke of God as a Being possessed of freedom, and a distinct personal existence above and beyond the world; and of man as having a separate existence from that of his Creator. Both the systems, that of Spinoza and that of Schelling, are to be distinguished from the absolute idealism of the Hegelian Pantheism, which regards thought as the only true existence, and reduces since, of things which are really distinct from each other, the one can exist, and remain in its state, without the other." "If any one part of matter were annihilated, all extension would vanish with it." Thus did Spinoza employ and strain the Cartesian principles to uphold his own doctrine. *Vide* "Ethica." Part II. Prop. XV. Schol. Epistle IV. ad Oldenburgh.

* *Mentis enim oculi quibus res videt observatque, sunt ipsæ demonstrationes: sentimus et experimus nos æternos esse.* "Ethica, Lib. V.," Prop. XXIII. Schol.

† Herr Schelling, in seiner früherer Periode, wo er noch ein Philosoph war, nicht im Geringsten von Spinoza unterschied. *Der Salon*, von H. Heine. Band II., s. 121. 1834.—Die Lehre des Spinoza, und die Naturphilosophie, wie sie Schelling in seiner besseren Periode aufstellte, sind wesentlich eins und dasselbe.—*Ibid.*, s. 267.

the Deity to a mere development of thought, in the human consciousness.

The moral tendency of Spinoza's opinions has led to strong condemnation of his system, independently of the unsoundness of its basis and superstructure as a piece of argument. Dr. Samuel Clarke's celebrated "Demonstration of the Being and Attributes of God," was especially directed against it. Both Spinoza and Clarke set out from the same point—necessary existence and necessary causation; and both speak in very similar terms of the relation of time and space to the Deity.* Clarke established natural religion on the universally admitted principle, that "something must have existed from all eternity;" which, in Spinoza's system, was blended with his doctrine of one all-absorbing substance. Clarke also strenuously rebutted Spinoza's fatalistic theory of divine and human liberty—which, as we have seen, amounted to the denial of any such thing as moral freedom.

Agreeably to a widely-extended impression of the character of Spinoza's philosophy, Clarke speaks of him as "the most celebrated patron of Atheism in our time."† This would seem to imply that he was an avowed unbeliever in a God; but Dr. Clarke could not mean this, as he had closely studied Spinoza's writings. In fact, he was, speculatively, not an Atheist, but an *Acosmist*; for he denied all real existence to the universe, and assigned all real existence to the Deity. "Far from being an Atheist," says M. Cousin, "Spinoza had such a view of God that he lost the view of man. Nothing finite appeared to him worthy of the name of existence, and with him there is no real being but the Eternal."‡ It would be unfair to Spinoza not to admit that he even utters many sentiments which involve much more than a mere philosophical admiration of infinite power, omnipresence, and eternal duration. As a single example, he says, in one place: "I have expressly asserted that the sum of the divine law, which is divinely inscribed in our mind, and the main precept of that law, is, to love God as the chief good."§ The life of Spinoza, and his character in the families in which he was domesticated, do not indicate that he realized in himself what we cannot but think was, nevertheless, the *tendency* of his Pantheism. This, however, is no uncommon fact in the history

* Clarke appears to have derived the idea of regarding finite space and infinite duration as attributes of the self-existent Being, from a passage in a Scholium of Newton's "Principia." Durat (Deus) semper, et adest ubique; et existendo semper et ubique *durationem et spatium constituit*.

† "Demonstration." 1716. p. 26.

‡ "Fragmens Philosophiques." Paris. 1838.

§ "Expresse dixi legis divinæ quæ menti nostræ divinitus inscripta est, summam, ejusque summum præceptum esse, Deum ut summum bonum amare." Epistol. 49.

of the human mind ; happily, men are often better than their systems, and cannot see the direction of the road they point to. But if Spinoza has been branded as an Atheist, without due qualification, and sometimes stigmatized as a sort of monster of impiety, certain it is that he has on the other hand been as much lauded, as though he had been one of the first saints in the Romish calendar.* Even some of those, however, who have been most anxious to do him justice, have not failed to admit that whatever might be the effect of his system on himself, "his doctrine amounted to Atheism, or little better."† Surely it is so ; for Spinoza's God is identified with man and the universe, all being bound together by an inexorable necessity ; so that his Infinite Power is no more directed by design and choice, than the motion of a steam-engine or a railroad ; and, being thus destitute of all liberty or free will, and even of all intelligence that is not in some mystical way identical with unlimited power, he can possess no true and real personality.

The failure of men of such extraordinary mental stature as Descartes, Leibnitz, and Spinoza, to establish a satisfactory system of metaphysical knowledge on some of the most interesting subjects that can engage the human mind, shows one at least of two things : either a just metaphysical philosophy is impossible, or their method of aiming to attain it is wrong. Now, the method, or fundamental theory of human knowledge advocated by the three great men above-named was essentially the same. It amounted to the doctrine of an infallible intuition : clear and distinct ideas, well-ascertained to be such, must lead to truth ; and yet, to what issues has this theory conducted ? It led Descartes to his vortices, Leibnitz to his monads, and Spinoza to his universe-God. What caution, then, is required—what

* *Vide* Paulus's Spinoza. Jena, 1803.—M. Cousin says,—“Sa vie est le symbole de son système. Adorant l'Éternel, sans cesse en face de l'Infini, il a dédaigné ce monde qui passe ; il n'a connu ni le plaisir, ni l'action, ni la gloire, car il n'a pas soupçonné la sienne. Spinoza est un Mouni Indien, un Soufi Persan, un moine enthousiaste ; et l'auteur auquel ressemble le plus ce prétendu athée, est l'auteur inconnu de *l'imitation de Jésus Christ*. “Fragm. Philos.”

Göthe says, “The great mind that had so great an influence on mine was Spinoza's. After I had looked round the world in vain for means of shaping my strange moral being, I fell at last on the ‘Ethics’ of this man. I found there a calm to my passions ; it seemed to open to me a wide and free view over all the sensuous and moral world. But what particularly riveted me was the boundless disinterestedness that beamed forth from every sentence,” etc.—“*Göthe : Dichtung und Wahrheit*,” p. 14.

Schleiermacher, a Lutheran clergyman, says, “Offer up with me a lock of hair to the holy but despised Spinoza ! The mighty spirit of the universe penetrated him ; the Infinite was his beginning and end. He was filled with religion and religious devotion ; and on this account he stands alone, elevated above a profane world, without disciples, and even without citizenship.”—“*Rede über die Religion*,” page 47.

† “Biog. Hist. of Philos. ;” article Xenophanes. See Vol. i. p. 85.

freedom from the *ignes fatui* of imagination, and from the egoism of association and pre-conceived notions, before we can safely apply so limited a power as the intuitional faculty of man, for seizing on truth ! What fallacies may underlie assumptions which are supposed to be proof against all objections ; and how easily, in a chain of argument professing to be constructed on the principles of an infallible logic, may an unsound link become interpolated, and vitiate the whole ! Again, may we not safely say, that the aim of metaphysics has often been extravagantly high ? The limits of the human faculties have been forgotten, and the failure has been proportionably signal ; in no cases more so than in the successive pantheistic systems of modern times, from Spinoza to Hegel.

ART. VII.—ON CIVILIZATION AND INSANITY.

BY DR. F. PARIGOT,

Formerly Inspecting Physician to Gheel ; Member of the Committee of Inspection of the Establishments for the Insane in Belgium. (Written expressly for this Journal.)

TRUE civilization is that which results from intellectual progress and the practice of morality in every class of society. The degree of science, and even of charity, with which the insane are treated in every country is in proportion to the degree of civilization such as we have just defined it.

But civilization may be, as certain pessimist writers pretend, the very cause that develops this disease in our time. We do not believe it. Professing this opinion, it remains for us to develop, in this memoir, why statistics show, during the last ten years, an increase in the number of the insane ; why we, on the contrary, believe that, in proportion as true civilization shall advance, insanity will diminish its ravages in society ; and, lastly, amongst the means to be opposed to this disease we will mention the treatment by *free air* as the best. We proceed, therefore, to explain our ideas and our convictions upon this subject. They are based upon the observation of facts ; the imprescriptible rights of the insane ; the duties towards them which are incumbent upon us ; and, lastly, on the various methods which the insane have been made to undergo in those countries where it is assumed that civilization is most advanced.

No one can deny that, the more a people is advanced the more will its attention be directed towards the means which education and physiology supply, to lessen, as far as practicable, the causes of a disease so grave as to destroy reason, even for a moment. It cannot be doubted that in this direction such a

people would strive to combat the results, especially if it thought that the evil was spreading in the different classes of society. Well, any government wishing to accomplish this important end would naturally be led to encourage the study of a science which treats of the diseases of the mind—diseases which might well be more frequent at epochs like ours, when everything is bent towards personal gratifications. Such a government would therefore teach psychological medicine in its schools, in order that the new generation of physicians should possess at least the first principles; it would encourage the attempts or innovations which this science might initiate either to cure the curable insane, or to ameliorate the condition of the incurable by restoring them to society, by admitting them to the domestic fireside, and especially by avoiding the construction of those vast and costly agglomerations of lunatics, in which dementia seems in the end to establish a permanent reign.

All this would certainly furnish for a model-people the sufficient reason to modify what had been recognised to be defective in any system of treating the insane. Unhappily, we should seek in vain amongst republics or monarchies for this people wise and foreseeing, which exists no more.

The history of humanity, unlike that civilization for which we hope, shows us the reverse of this in ancient and modern times, if, indeed, we except fifty years.

The state of barbarism of nations, and the coarseness of their manners, have had for their consequence the negation of all pity for those who suffer at the same time both in their moral and physical constitution. It may be said that in ancient times, and even now, there has not been, and is not yet, any perfect knowledge or true practice of the duty owing to the insane, as it ought to be understood, without calculation and without any hope of reward. Moreover, we may behold ancient peoples, when they were organizing themselves—formed for the most part (as we see in North America) of elements collected by chance,—seeking at first to free themselves from everything that importunes them, and which seems to hamper them in their course: they have few hospitals and prisons; they are useless, for, most frequently, they hang their criminals without trial; and woe to him who needs public aid, for he is abandoned to his lot. Our ancestors, too, had little pity for those who could not follow them to battle. Ransack history: the insane are objects of buffoonery, or burnt as being convicted of sorcery. Later—they are abandoned, and they perish for want of care in hideous prisons. At the present day, even, do they not execute maniacs before the eyes of all the world, in spite of the protestation of science? When all these things are considered, it is not sur-

prising to me that on the Continent the insane are held within the jurisdiction of the Minister of Justice, but in the division of the condemned.

Each people has its own manner of seeing things. Excepting the Turks, who still maltreat their insane, the Orientals add a certain derision to the want of care. They look upon the insane as inspired, and thus, like ourselves when we want to drive away a beggar, they abandon them to the *grace of God*! Fortunately, there public pity and liberty are not denied them. If this is what some uncultivated and fanatic nations still do, what is then the charitable practice of the civilized West? It is this: our first feeling at the sight of a sick man who is delirious is that of fear and disgust, and our instant resolution is to put this object of dread out of sight. For the poor there exist closed asylums, which too often fulfil the purpose of the ancient *Oubliettes*. This is, at least, the idea formed of these establishments by the public. But Government, which has considerably improved them, urges the erection of closed asylums in every province, because thus vagrancy is rendered impossible. It was in this spirit that the French law of the 24th August, 1790, was framed. This provides for the avoidance of the disastrous events occasioned by *furious* lunatics left at liberty, and against the wandering of *mischievous* and *ferocious* beasts! Singular combination! This law ordered cells for the first, and cages for the last! Behold what prejudice ordained at the moment of a reform which ruined so many abuses. These prejudices permitted the confusion of men and brutes, and made no distinction between the different kinds of insanity, although it is easy to see that nine-tenths of the insane offer no kind of danger to the common life. As for the rich insane, or those belonging to the middle classes, speculation arose to meet the necessity of removing the patient, as well as that of ridding oneself of a turbulent guest. Capitalists, highly honourable, I am happy to say it, have calculated that for a certain investment it was possible to entertain suitably and economically a large number of insane patients at the same time, and thus to draw considerable profits from an industry which, after all, is not of the most agreeable. Competition has even led to the reduction of the charges, whilst the dearness of provisions has still further diminished the profits. Thus, we are acquainted with one of these speculators, worthy of sympathy, who has preferred encountering losses rather than to lessen the comforts of his patients.

In general, these are the tendencies of our age: to ameliorate the condition, material and moral, of the secluded, but at any rate to keep them secluded.

We propose to retrace the ameliorations, and to mention the

efforts of the men who have recently striven to lead public opinion to better sentiments, and especially to restore to science the position which it becomes her to occupy in the treatment of mental alienation. We cannot conceal from ourselves that hitherto the scientific element has counted but for little in nearly all public or private establishments, unless it be those governed by eminent medical men. Some distinguished men have exclaimed against this state of things; but then they are, according to the world, Utopians, or physicians called *Narren-doctor*, *Zotten-doctor*, or *Mad-doctor*. As a rule, administrative authorities and speculators trouble themselves little about psychological physicians; and what an ignorant public imposes upon them in the way of privations, they are compelled to carry out, to the detriment of the insane.

The following dialogue will lift up a corner of the curtain:—

A Relative (to the Superintendent Proprietor).—Sir, I understand that you have different prices for patients?

The Proprietor.—Yes, Sir; but the care and the attention paid are the same for all my inmates, excepting as to the room, the number of dishes, and certain extras which depend upon the scale of payment.

The Relative.—Well, as my patient scarcely eats at all, I make up my mind for the lowest scale. Besides, you tell me the care is the same. You will be kind enough to give him all the *extras* for which he may ask. We should be so pleased to have him well treated!

The Proprietor.—Let us understand one another; for experience has taught me that these extras are often useless when they are paid for separately.

The Relative.—That is, give him all that is *indispensably* necessary. Well, we beg of you to let him see no one; this point is very important. Our misfortune must not be known. On this account we have even been on the point of sending him abroad.

The Proprietor.—Will you employ a specialist physician? This would be at your cost.

The Relative.—No, no! it costs us enough as it is.

After all, at the worst, what could happen if science were entirely put aside? The patient would have but little chance of recovery; or he would soon die; or, lastly, he would fall into the chronic state—into that twilight of reason in which the life of a lunatic may be prolonged in the silence of a cloister, or of a division of “*quiet patients*.” There are proprietors who have even written and maintained that there was no mental medicine, and that sojourn in their asylums answered every want! Truly, it seems hardly worth while to disturb a state of things so

agreeable—with which everybody seems satisfied—except the lunatic.* But what, after all, is this unfortunate? If he returns into the world, cured, he has lost the consideration in which he was held; he is exposed to slander; and if he is slow in recovering, ought he not to think himself happy in being allowed to live amongst his fellows? It is only a madman, a wretch who has lost all—rank, family, and even fortune, which is sometimes inherited whilst he still lives. Clearly it only remains for him to create for himself a new existence—a fictitious life like that of his companions of the insane, and a few servants more or less pleasant. He will remain, as has been said by our respected friend, Dr. Biffi, of Milan, for long months, for long years, in the same place; a hundred times a day he will see the same objects and the same scene, bounded by the inexorable wall of the enclosure. At this price the finest apartments become unendurable, and the most beautiful gardens put on a frightful monotony. Better a thousand times the last hovel of the labourer in the open country. Fortunately there are exceptions to this cloistral *régime*; there are also institutions where this weary tedium is diminished; but these are exclusively for the rich, and are directed generally by the most eminent men in the medical profession, whose reputation has attracted patients of this order. And even these houses, if they admit too large a number of patients, necessarily lose the particular character and the kind of care which it belongs exclusively to the family to impart.

We cannot help saying that, if in our time a certain stage of amelioration has been reached which some persons look upon as the ideal of what can be accomplished, we have, nevertheless, entered into a path quite artificial and pernicious in a therapeutic point of view—that is, of erecting everywhere vast phalasteria of lunatics, in which the public may rid itself, at a cheap rate, of beings irksome to society. From the prejudice mentioned above often proceeds the denial of justice and of medical care. There is refused generally:—first, the most suitable means, and often all means, of cure; secondly, domestic life; thirdly, relative liberty; fourthly, the enjoyment of private fortune in its application to personal wants;—all this because mental alienation is still regarded as a stain that only oblivion or death can wipe out. This is why it has been said with truth, that it is better to be dead than to be struck with one of those numerous affections, of which the whole is called insanity.

What is curious enough is, that the great nations have each of them, more or less, pretensions to a certain superiority in power, riches, science, and some morality, and that it is to this latent

* It is not necessary to say that there are exceptions to this rule, and that they are the more honourable because they are rare.

relation between the degree of civilization and of beneficence, that we must attribute the efforts of certain German, English, and French alienists to raise the moral worth of their country by competitive boastings of the ameliorations that have been realized in each. This competition is good ; but we shall have occasion to remark how imperfect these ameliorations still are, and especially how badly they are directed, because they end in nothing but the satisfaction of spending enormous sums in the erection of immense palaces, where it appears that infirm populations, continually renewed, will come, to perpetuate their sad condition.

Yes, notwithstanding the progress of enlightenment, and the good which it produces, it will yet be a long time before the effects will reach the insane through the obstacles heaped up around them by time and prejudice. Instead of the self-gratulations of the time, would it not be more just that the history of the bad treatment which the insane have had to undergo, and which they still have to undergo, by far outweighs the catalogue of boasted ameliorations. That long list of torments formerly inflicted as punishments, and now, under the name of *moral treatment*, contains a series of facts, of which the odious and ridiculous aspect has been perfectly appreciated by Dr. Ramaer of Zutphen, in Holland, who has made this the subject of an excellent article in the *Nederlandsch tydschrift voor psychiatrie*.

Besides, it is not so long ago that these ameliorations have been introduced ; and it is matter for astonishment that it is almost at the end of the nineteenth century, that the nature of our affective sentiments, and especially that Christian morality, had at last reacted upon our institutions as regards the insane. For the honour of the medical profession, this path has been opened by physicians. In different countries, it is to Pinel, Daquin, Samuel Tuke, Langerman, Ferrus, Chiarurgi, and in our country to Guislain, that we owe the reform of the government of the insane. It belongs, however, to all the world to follow in the steps of these beneficent men—to advance in the path of progress ; for all is not yet accomplished in the way of restitution to men who for a long time have had no voice that could be heard in the world.

Recently, some well-meaning persons have believed, when they beheld religious congregations devoting themselves to the establishment of asylums for the insane, that thus a great good and progress would be achieved. But it must be said, because it is the truth, that with the exception of the incurables and idiots, this is an error. The man of the world, the mother of a family, young people, suddenly seized with this disease, can these derive any benefit from a medium in which nothing recalls to them what

they have lost? — a medium whose idea, whose metaphysical aims, they are for the most part unable to understand, and in which the wants and the aspirations of actual life are most commonly ignored. How much time, and how many mutual concessions are necessary in these asylums, where such a variety of natures are assembled! No: we sincerely believe that convent-life is the very worst for the insane as regards their recovery. We maintain, upon ample experience, that anywhere than here religious ideas will have more influence, and will be better received. Besides, it is obvious that the future comfort of the insane only depends upon the manner in which each of us shall comprehend his duties towards them, and very little indeed upon the moral compression and the physical continence that can be exercised over them.

Thus, what nature and charity exact, actual civilization cannot yet give; for it does not admit the rights of the insane, or the obligations which these impose upon us. Our epoch is therefore but one of transition, during which, if we seek to do good, we must not fear to deviate from the boundaries that private interests and the ruling egoism might counsel us to respect. Let us then tell the truth: the reform of the government of the insane is far from being capable of being arrested; it is yet but at the beginning of its work; the public conscience has not yet spoken; and certain learned men, still in error, seek only for means of restraint to obtain the cure of insanity; whilst gentleness, patience, a country life, and the resources of medicine might suffice. Actually, as Dr. Ramaer proves, we have substituted for the old methods of violence, others as cruel, but analogous to the first. Now, without wishing in this article to enter into therapeutics, we may say, that the question for science to determine is, whether, yes or no, isolation shall be accompanied by physical and moral restraint?

In the rapid review of the practice of different countries, we shall have the opportunity of comparing the methods employed with that followed at Gheel, a Belgian village. We shall prove how the free air of the country, the contemplation of nature, agricultural labour, and especially family life enjoyed amongst good and simple country-folk, constitute a moral and natural medication more consistent with true civilization than any other. Peasants perform through zeal, through the traditions of example, through necessity, perhaps, what we ought to do through duty, and conviction of the resulting benefits. Let us hope then that the future will solve what still causes the insane to be excluded from the circle of humanity.

According to Reid, it was towards 1803 that the barbarism of ancient times began to lose its intensity in Germany; before

this epoch, he says, we shut up the insane like malefactors, in the cells discovered in old dilapidated prisons, which had long become the habitual dwelling of owls ; or else, in order not to hear them, we hid them in the belfries of the communal towers, or in the cellars of houses of correction, wherever, in short, no look of compassion could find them. At the present day, adds Mr. Ramaer, in the memoir above cited, there exists in Germany no public establishment whose regulations forbid the abolition of methods of violent repression, and in which, on the other hand, we do not find the prejudice in favour of their necessity rooted in the mind of the superintendent. The strong arm-chair, the rotatory apparatus, the bonds and fetters of every kind, douches, strait-waistcoats, &c., constitute the basis of the penal code in force. Lastly, many of these establishments are of a mixed kind ; that is, appropriated of the reception of correctional delinquents as well as of the insane.

In this country philosophical and religious opinions have not been without influence on the condition of the insane. Thus, when transcendental metaphysics reigned in its schools, the question of first causes, and of their influence upon the human mind, was discussed ; it was then that Dr. Heinroth—a learned physician, be it admitted—pretended that mental diseases drew their principle from the community between the human soul and the Devil ; which, according to him, admirably explained why the insane are neither free nor reasonable. He believed himself thus authorised to deliver his patients from this possession, and for this purpose he employed correctional wards, furnished with all the machines and engines necessary for this expurgation. He recommended that in each ward should be placed *four executioners* for two hundred lunatics. Another physician, Lichtenberg, pretended that blows with a stick was equally useful in the treatment of insanity ; because the soul is then forced to cling firmly to the positive world. Lastly, a certain Dr. Picht asserted that two or three blows with a birch stick worked wonders in the cure of insanity.

At the present day all Germany condemns these cruelties ; and nothing that we can say can equal the force with which this system is repelled by alienist physicians. As to those abstract discussions upon the question of knowing if insanity depends upon a state of sin,—if the soul can be sick,—if the body and the soul can be in relation with spirits or the Devil,—all these have vanished from amongst psychiatric physicians worthy of the name, because they are more capable of probing the wounds produced either by the brutality of materialism, as well as the insanity and the perversion of a mysticism that only seeks to traffic upon humanity.

In this vast empire the first reforms were effected by the celebrated Langerman; they first penetrated the asylum of Sonnenstein, in Saxony. However, it is only since 1820 that new asylums, built according to the rules of art and the ideas of the day (which exact a crowd of compartments and divisions—the despair of architects and classifying physicians)—it was only then that these asylums were erected at Schleswig, Siegburg, Heidelberg, Prague, Vienna, &c. The patients were divided into two categories, the curable and incurable; lastly, in order to secure method and tranquillity, they were further subdivided into *violent*, *quiet*, *half-quiet*, *dirty*, *idiots*, and *convalescents*. Thousands of plans were contrived to discover the x of a good classification. Every alienist physician of any repute must even travel a long time, and visit the principal asylums of Europe to detect the indications in all the imaginable forms of straight lines and curves, but he will take especial care not to visit Gheel, where the difficulty is completely overcome. However, the establishments which we have just cited are remarkable for their excellent organization; they contain schools, libraries, gymnasia, recreationary wards, &c.

In general, German physicians practise but sparingly a system imagined some years ago in England, by which all restraint was abolished,—called in consequence, the “non-restraint” system.* They pretend that this is an Utopia in an enclosed establishment, and that no discipline is possible without material means of repression; not to speak of cases of acute mania and of violent dementia, in which restraint is indispensable. It appears, indeed, difficult to suppose that, in a large assemblage of patients, idiots and epileptics, all more or less irritated, from being confined, it is possible to establish order by means of exhortations, or by appealing to the affections of maniacs. However this may be, all writers in our day are agreed in declaring that Germany is the model country for medical treatment (?). We find there registers in which are recorded the history of the affections of each patient—the symptoms, diagnosis, prognosis; the prescriptions, and daily visits of the physicians are so recorded, that the recovery or autopsy come, so to speak, to approve or condemn the methods pursued. It is plain that in such a manner science may make true progress, and that the patient derives a real benefit. What an interval between this broad spirit of examination and appreciation of things and those conditions, paltry and discreditable, which are sometimes associated with the functions of alienist physicians in certain countries! Who would believe that there exist establishments in which the physi-

* This term indicates the negation of an evil. *Free air* is the affirmation of a good.

cian is required to take charge of two or three hundred patients for five or six hundred francs a year! In Germany, there is for every asylum an adequate number of physicians to allow each of them to institute a conscientious examination of the patients, to study the new cases, and lastly, to keep themselves on a level with the science they are called upon to practise. We are convinced that the result is material and moral benefit for asylums honourably conducted.

From what we have just related, it follows that in Germany, as everywhere else, the insane were for a long time abandoned, or, at least, much neglected. From this fact it may be concluded that the development of civilization has been long and slow; and also that it will not stop in the path of ameliorations and their consequences. No country can count a greater number of learned psychologists, such as Ideler, Bergman, Damerow, Guisenger, Fleming, Roller, Tessen, Nasse, Jacobi, Droste, Laehr, Erlenmeyer, Eulenberg, &c. &c. Private asylums have been established for the easy classes, and in these, we may be assured, the family life is perfectly applied to the treatment of insanity; we find there united all the cares and luxuries that lessen pain and restraint; such as the asylums of MM. Tessen, at Hornheim, of MM. Engelken, at Obernenland, and at Rockwinkel, near Bremen; of M. Erlenmeyer, at Bendorf, near Coblenz, &c.

If, then, the insane have had to wait a long time for ameliorations, they now possess them in as complete a form as the current ideas will allow. Why did we need so many centuries for this? Must this delay be attributed to the ancient rudeness of the Northern people,—to the simplicity of their manners? It is perhaps difficult to say, but this is how we understand it: during the long series of years that peoples take to settle themselves in a country, during what is called their youth, in the midst of wars or great works, which assure for them a material and political existence, alienation is rarely produced; movement seems to carry off and destroy the germ of this disease; it is only after a long time that man has been able to apply himself to the cultivation of his intellect, of his destiny, of the arts and sciences; and then it appears. New wants then arise; the external combat, from material that it was, becomes internal and moral; suffering arrives, and long years elapse before the abuses of the first institutions, founded upon force and the right of conquest, are replaced by those which have for their foundation reason and duty. This eternal struggle of the mind and matter then begins, in the order and value of political and religious institutions. Then the time comes when minds are exalted; then the intellect is exhausted, the passions are excited, and all this often in relation with sufferings which have induced a dege-

neration of the organism, of the temperaments and of manners. Then insanity breaks out ; but can it be said that civilization is the cause ? No ; it is a period of struggling that we must pass through ; it extends to the interests of humanity. It even happens that the system of public and private education has become so imperfect that it no longer answers to the real wants, and only serves to prepare deceptions for those who enter the different careers open to the activity of man. Yes ; these times ; are times of transition, which bring evils that civilization will destroy. In result, it appears that the number of lunatics has much increased ; but let us compare epochs with each other, and we shall have the conviction that insanity is, after all, only in proportion with a more numerous population more instructed, and which demands far other things than contented it in former times ; then also this disease was rare,—it remained ignored, and received aid from no one.

Let us open history, and we shall see that the same nature, the same country is not always able to oppose the same resistance to morbid causes, physical or moral. Nations traverse phases of development and of decay. Who shall say, therefore, that the civilization of humanity does not advance ? We believe that causes may act unfavourably on certain countries, especially when the ferments of the future appear to be everywhere in action, without accusing civilization.

As to the treatment of insanity in Germany, it was null for centuries. Griesinger, the learned Professor of Tübingen, says in one of his works, that once within the walls of one of the prisons devoted to lunatics, a man never came out again. For more than thirty years this state of things has ceased ; and, if it is later that in other countries the care of these diseases has been undertaken, this arises from the fact that with this people, so profoundly reflective, ideas had outstripped the means of executing reforms.

As we have said, physicians were the first who effected reform ; we do not, however, assert that the initiative entirely depended upon them, or that reform was solely due to their zeal. It must be admitted that, in their epoch, reform existed in the ideas of the mass. Every one knows that at the end of the last century nearly all institutions were regenerated ; at this epoch of investigation and of labour, a question so important as that of the security of personal liberty could not be overlooked. Everything was examined ; and a generous physician, the celebrated Pinel, aided by a man not less meritorious, the administrator Poussin, profited by the opportunity to ameliorate the lot of those upon whom a cloistral life was imposed. The great principle of division of labour had just been recognised as indis-

pensable in medical science, and it came to pass that the splendid specialities we have cited above were soon brought forth. Then insanity, that abject disease, until this period attaching itself to that new science which these men had created, ended by acquiring an importance of its own. In reflecting well, it was suspected that it was possible to fall into insanity very honourably. In fact, the amelioration of the lot of nations often depends upon individual efforts; but it had hitherto been forgotten. How costly, then, these efforts had been to those predestined workers in the progress of science and the arts. No one had related how many of these men had lost their reason in this gigantic labour—not through pride, as we hear the vulgar say, but as the consequence of their exertions, and often because they had to undergo the deceptions of their contemporaries. How many statues have since been erected to celebrated madmen! Byron, convinced of this fact, asserted that the less of folly the less from *above*. Well, civilization still wants devoted men. Genius will still be unappreciated; excellent inventions will still lead to misery and sickness! Are we to say, for this, that we must remain where we are, and then fall back?

It is intelligible that in their first application, the Good, the True, Liberty, may have been the cause of the loss of a crowd of men; but Evil, under the shapes of ignorance and despotism, have destroyed many more, and without any compensation whatever. Progress, in her march, tries every method. The legitimate desire of attaining truth has led to miscalculations; but it is no reason why human activity should stop itself, because some men faint under the load! Happy those who prove useful to humanity; their mission has been fulfilled. But, after all, this loss is but of trifling moment when compared with the advantages that the future will gain from it. One day the good will preponderate. It is in necessity that all sciences take their rise; it is for good that all the means of Providence are legitimate, although we cannot always follow the windings she takes to reach her goal. Thus, to return to our subject. Psychiatry was born, and must serve to combat those diseases which, according to certain persons, are augmenting with our tending to civilization—that is, towards good. It is at least a consolation in these difficulties to think that it will yield us the secret that will dry up the source of these diseases.

It is interesting to study what a great nation like France has done for the cause of the insane, since the epoch of Pinel whilst following her course towards civilization.

Very distinguished French alienists have published many works and memoirs on insanity. They have also described with

care the principal public establishments of Paris and the departments. Many of these last are, according to these reports, improved, and have become in a measure model asylums; but they are not numerous or extensive enough to receive all the sick. In this respect the French law of 1839 has remained a dead letter. Colonies of lunatics would therefore be a blessing.

Here we must clearly understand the meaning of the word civilization; for France has always arrogated to herself the most advanced civilization, and the belief in her own intellectual and social pre-eminence has never ceased to prevail. One of her celebrities, M. Guizot, has indeed affirmed in his Lectures, that this pretension is philosophically legitimate. Every people, he says, recognizes the charm of the social relations, the gentleness of manners, the easy life, and at the same time the intellectual development of the French nation; no one disputes the qualities which distinguish Frenchmen: but is this the kind of civilization that is to better the lot of the insane? No; for it is easy to perceive in the works referred to above, that even in France the alienists are obliged to submit to every kind of opposition from the Administration, from its jealousy, its bad will, and especially from the neglect to which a crowd of lunatics are even yet consigned. Would it be believed, for example, that some unhappy beings are unable to reach the asylum common to four or five departments alive? Where is the recognition and the practice of duty here; and of what avail in such a case are the superiority and the charm of social relations?

The French Government ought to profit by the possession of so many earnest psychological physicians; and yet, read the programmes of her medical schools—you will not meet with a single course in which that instruction is officially given. As for the advantages of which M. Guizot speaks, they are really of little importance. Moreover, they no longer belong exclusively to any nation, and it seems to us inaccurate to pretend that in France the individual and society have equally progressed towards moral, intellectual, and material perfection. Every nation strives to reach this; let us hope that one day the common end will be attained, for it is on this triple condition that depends the diminution of our infirmities.

Chateaubriand has said that civilization does not describe a perfect circle, nor move in a straight line; it is, he says, on the earth like a ship at sea: beaten by the tempest, this ship makes her way, regains her course, falls sometimes below the point whence she set sail; but in the end, she meets with fair winds, and every day makes good something on her true course; and, lastly, makes the port for which she was bound. Let us not be deceived: display, luxury, the theatrical pomp of public cere-

monies, are no certain signs of civilization and happiness; they rather hide a deep abyss when the moral element does not protect them. Truly, the material conditions of well-being are indispensable in order to bring forth the spiritual and moral germ implanted in us; but nothing must be exaggerated in what surrounds it, either in the physical or moral conditions; superfluity may injure as much as misery, which strangles the mind. How many false impressions (the source of many misfortunes, of insanity itself) have remained in the brains of those puppets that luxury delights to fashion!

Some authors have maintained that man in his natural state has only simple tastes, and few wants; but that from the moment that he civilizes himself, he acquires by this fact a mass of wants, engendering in their turn pains which may lead to folly. Is it then the want of the enjoyments and the riches of false civilization which makes insanity more frequent in our time? If that were true, we must despair of humanity; but this mode of reasoning seems to us false. If man only felt those wants to which his organs give rise, he might content himself, like animals, with the enjoyments which they give; but his intelligence, his feelings, his voluntary activity, revert to him the enjoyments of the mind and of the heart: those are the enjoyments he prefers. If he abuse his intellectual and moral faculties, if he exaggerate his organic instincts, if despotism brutalize him, he certainly creates for himself fictitious wants or shameful enjoyments, which will alter his sensibility, or give him a sickly exaltation. Happiness, as the vulgar understand it, blunts the feelings and the mind; and every day we see men exhausted ready to fall into melancholy.

We might then conclude, from what precedes, that amongst the causes which lead to insanity there are material and immaterial; that they may take their origin in the social and industrial relations, in the mode of instruction, in the religious relations, and lastly in moral error and organic degeneration. It is then the conscience or the organism, which, primarily attacked, react on the indissoluble link of mind and body. Thus, for example, misery vilifies the body in order to degrade the mind, whilst moral perversion kills the mind and heart first before destroying the brain by dementia.

France alone still possesses, as far as we know, the glory of having seen arise a medico-psychological society, composed of illustrious philosophers and physicians. This society is the most solid guarantee that reform will continue her work in that country. One of its members, M. Moreau (de Tours), after having examined the colony of Gheel, has publicly announced his desire to see a similar colony bestowed upon France. He

declares, in his medical letters, that Gheel approaches nearest to the ideal of perfection in the treatment of the insane. The opinion of this savant, who has made a special study of the relative value of all the European establishments, is most precious. He has done us the honour to repeat it in these terms:—"I say it, and repeat it again, what I said fifteen years ago, *there is no asylum that is worth a good colony, and in every country it is possible to colonise the insane.*" In 1840, M. Moreau feared that this establishment, unique in the world, would be destroyed; at the present moment, administrative difficulties might bring about that result; so that the following phrase, borrowed from his letters upon Gheel, is still appropriate:—"If I pronounce myself so openly in favour of the colony; if I endeavour to preserve it from a ruin *that some critics more than severe, some unfavourable reports, have rendered imminent,* I am anxious that my sentiments, the nature of the convictions upon which I act, should not be misunderstood. Gheel is, after all, but the imperfect realization of a theoretical idea, for which I preserve all my interest, all my consideration." That also is our opinion. To render Gheel perfect, at least as far as possible, it would be necessary to withdraw the government of the insane from the direction of certain mayors of villages; it would be necessary to concentrate the power in the hands of a chief physician and a director. Nothing was more easy; immense heaths offered every facility for the establishment of an infirmary out of the reach of certain avaricious men, who for many years have trafficked upon the lunatics and their nurses. Thus, a learned man, remarkable for his works and the independence of his mind, asserts that Gheel may be reproduced in every country. Convinced of this truth, he presented to the International Congress of Beneficence, held in 1856, at Brussels, the following proposition:—"To encourage the establishment of colonies of health for the indigent insane, asylums in free air, in which family life should be offered, as the best curative means of insanity." The Congress could not take up a question very secondary amongst those which then waited and still wait for solution, such as that of the means of subsistence, from an economico-political point of view—of pauperism, of emigration, &c. But it received a favourable attention in the section, when it was necessary to vote twice in order to adjourn it to the next Congress. In fact, this question is more important than is imagined; it is a question of the liberation of a considerable number of prisoners, of substituting a productive labour for idleness, to divert public assistance from the erection and maintenance of those immense asylums which England, the United States, and other countries exhibit. We do not despair that soon free colonies, like Gheel, will be esta-

blished in Germany, France, Russia, and perhaps even in England: nothing is more easy wherever there exist uncultivated lands and sparse populations: the attempt of free colonization will reduce to nothing all the objections which the enemies of this system have heaped together.* Besides, it is easy to understand how persons of good faith are in error, if they admit, without examination, the opinion of the celebrated Esquirol, who, seeing nothing but the necessity of removing the insane from the scene where they had contracted their disease, had said that a lunatic asylum is an instrument of cure, and that in the hands of a skilful physician it is the most powerful therapeutic agent. It is conceivable that isolation in the country, in the midst of a family ordered *ad hoc*, and under the direction of a physician equally skilful, offers much greater advantages.

In France, asylums have assumed forms which no longer resemble those gloomy prisons or hospitals, in which formerly one drew back, in order to take in the horrible spectacle, that of fury and disorder, produced by the amalgamation of all human miseries. At present Bicêtre, La Salpêtrière, Charenton, St. Yon, Maréville, Auxerre, and under the direction of the Ferrus, Parchappe, Baillarger, Moreau, Girard, Renaudin, Calmeil, Lelut, Falret, &c. &c., has become a monument erected to the relief of sick men. We will say further, that many private asylums approach the free establishments, which they imitate as far as possible by the system of family life. Such are the asylums of MM. Voisin and Falret at Vannes; that of M. Brierre de Boismont, a learned psychologist at Paris; that at Passy, under the direction of Dr. Blanche, &c.

In France, as in Belgium; in Germany, as in England, there remain *lacunæ*, that many alienists have pointed out. It would be necessary—

1st. To encourage studies, by creating in schools of medicine, or in the universities, chairs of psychological medicine and clinics for those diseases.

2nd. To assign the direction of lunatic establishments to especial physicians, and to nominate clinical teachers in the more important public asylums.

3rd. To make it imperative that the public and private establishments should be situated out of towns; that they should be sufficiently extensive to offer to the insane distractions, agricultural works, and gardening; that they should be well kept, and under the responsibility of a physician charged with the hygienic and medical superintendence, as well as with the general direction.

4th. To form country colonies for the insane, possessing a

* These enemies are not all disinterested in the question.

thérapeutical centre, under the direction and inspection of an administrative physician.

Why create chairs of psychiatry?

Because, out of one hundred young physicians, hardly ten will trouble themselves of their own motion about this branch of medicine. Rarely will the remaining nine-tenths be in a position to recognise the development of a mental disease and its origin, although it is often only in that period that cure is possible. Hence proceed the irremediable cases that alienists are called upon to treat at a later stage.

Why make physicians the responsible administrators?

Why appoint physicians as clinical chiefs in the great establishments?

Because this is the only means of keeping in the van interests which at first sight appear distinct, but which practice soon recognises to be intimately connected; interests which the administrator must appreciate in a medical point of view, as well as the clinical chief must do in their applications.

Proved men, like the chief physicians, can and ought certainly to exercise the most absolute authority in a lunatic asylum, in order to possess all the means of action upon mental disease; and the physician alone is capable of judging of the opportunity for administrative measures relating to the insane.

Why ought all public and private lunatic establishments to be situated in the country?

Because it is there only that the family life can be realised suitably for the insane, who need air and space to act without danger to any one, and especially to be removed from the circumstances which surrounded the onset of this disease. These establishments would be therapeutical centres, which would have farms as subsidiary establishments. The rich would find these distractions, and the poor would work in the fields.

The air of the fields, as says one of the princes of science, Alexander von Humboldt, is the first and best therapeutical agent. Here are his words, extracted *verbatim* from his celebrated work, *Kosmos*:—"The simple contact of man with nature, that influence of open air—or as other languages have it, in a more beautiful expression, of *free air*—exert a soothing power, they soften *pain*, and allay the *passions*, when the soul is agitated in its utmost depths." This true and noble remark of Humboldt dispenses us from saying another word in favour of colonies, which we maintain to be the holy ark of the cure of insanity.

Who will not be struck with the coincidence of the first reform of the penitentiary system of the insane in France and in England? It was in 1792 that the celebrated Quaker, Samuel Tuke, was the first to effect a reform in a new asylum established

by him near York. The mental disease of George III. had contributed to fix attention on the treatment of insanity. The physicians of the King disputed amongst themselves; discussions took place in the House of Commons and the House of Lords;—all this revealed that psychological studies had made little progress, and that the condition of the insane was most wretched. It is impossible to picture to ourselves the barbarity with which these last were treated.

Later, Parliament instituted several inquiries—in 1815, 1816, and 1827—in consequence of which St. Luke's and Bethlem were ameliorated. At length, England, after having erected admirable asylums in different counties, and exhausted all the modifications of the system of seclusion, about ten years back inaugurated a new system—that of “non-restraint”—invented, it appears, by Dr. Charlesworth, claimed by Dr. Hill, but principally put in practice by Dr. Conolly, formerly chief physician to Hanwell. In this system, the object is not to aggravate the condition of the patient by mechanical restraint. Immediately, satirical attacks were poured forth in France against what appeared *prima facie* an impossibility. Liberty of action, when one is maniacal or demented; union, order, peace, amongst maniacs or melancholics; all detained in spite of themselves in an asylum! It seems, indeed, that the necessities of a closed asylum compel us to certain small violences—to some means of physical or moral control. As to the basis of the question, of what importance is the form of restraint?—be it a barred or a padded cell, handcuffs, or a strait waistcoat—that matters little. But, according to our opinion, the good of this reform must consist in the principle of *gentleness*, which must necessarily be employed. The cares and the patience of which the insane have been the object must also have reacted profoundly on the administration and moral organization of the establishments when this principle is employed. In England, it seems that alienists are still more or less divided as to its value. The Commissioners in Lunacy distributed a circular to all the alienist-physicians, in order to elicit their practical opinion in a report upon the question of the application or rejection of the “non-restraint” system and of “solitary confinement.” In conclusion, the Commissioners felt themselves compelled to establish that the suppression of means of restraint was only a question of money—that is to say, that straps and mechanical means of restraint must be replaced by a numerous staff of attendants. They admitted, however, with the greater number of alienists, that cellular seclusion may be necessary during the paroxysms of mania, &c. Dr. Forbes Winslow, the editor and distinguished founder of the *Psychological Journal*, opposes the somewhat too exclusive conclusions

of the Commissioners. He thinks that the treatment of an insane person ought, like that of a person not insane, not to depend upon abstract and preconceived ideas ; that we must act, according to the medical indications, with conscientiousness, honour, and firmness, without any other consideration than the aim of being useful. We completely approve these ideas ; they are quite applicable to the "free-air" system, in which all the necessary precautions are taken to prevent a patient from doing injury to himself or others.

However, it cannot be denied that the principle of sequestration and of medical isolation has sometimes furnished to crime the favourable opportunity of accomplishing its objects over the fortunes, if not over the lives, of those who had been incarcerated. The "free-air" system can never lend itself to this ; and this is an immense guarantee. Be it indifference or error, sequestration has ruined a crowd of persons whose nervous dispositions had by this means been rendered altogether insane. A man who might have recovered in a few days in the country, has ended by losing his reason behind the bars of his cell ! The treatment of the curable and incurable in the system of seclusion admits but of little difference ; it is, at bottom, the penitentiary system of seclusion that rules over the medical treatment. What must we think at the present day, on seeing those endless combinations in order to arrive at cells which resemble the large cages of menageries, and barred beds which resemble the gridiron of St. Lawrence, &c. ? All this is invented to subdue, to break the spirit of the patient, who, for the most part, has but too keen a sense of the misfortune that weighs upon him. Honour, then, to England, which has introduced a principle which can only lead to the "Free Air" and the "Family Life." The greater number of those immense asylums, in her bosom and in America, look from afar off like giants destined to swallow up their populations !

In "non-restraint" there remain, it is said, no more straps, straitwaistcoats, cells. So be it ; but for the convalescents, the periodical lunatics, peaceful maniacs, the melancholic, the weak-minded, there are ever and always lawns, galleries, and gardens, in which they wander ceaselessly, without finding a friend to guide them in the night of their intelligence. How different from what passes in the families where the lunatic is admitted into ordinary life. The father, the mother, the children, the servants of the house surround him, take care of him, and continually direct his feelings, his affections, his ideas. Compare what passes in the cottage of a peasant, or in the house of a citizen who receives a lunatic at Gheel, were it even a foreigner whose language they could not understand ! Behold

here medical isolation complete ! It is a society, small indeed, very simple, not versed in all the artificial ceremonies of towns : at the first they must communicate by signs ; but there is the beneficent activity of the mind—it is life, in fact. The attention is turned aside from bitter memories and forced to new wants. In the end sympathy is established, and the lunatic may perhaps again be restored to humanity.

The greater number of alienists who advocate the system of seclusion, pretend that the patients have often no wish for communication with the world ; they want complete repose of mind in certain cases, and in others the discipline of the cloister. This may be necessary for a brief space ; but then how much greater is the peace of mind in the open air, how much more active and more natural is the solitude of the fields, heaths, and springs !

Before concluding, let us say, that free life for the insane has already its defenders and partisans. All the foreign physicians who visited Gheel have expressed their admiration of the establishment, and their regret at seeing that this ancient colony is not yet completely organized ; and especially that an infirmary, worthy of the name, and in proportion to the number of the insane, has not yet been constructed, although the law and the regulations which prescribe it are more than *six years* old !

Dr. Droste, of Osnabrück, has developed, in an article in the journal edited by him, the mode of existence of the insane at Gheel, their wants, the absence of organization of the medical service, and the deplorable state of the administration. The rectitude of mind of this writer, his frank generosity, so well known to his numerous readers in Germany, double the value of his approbation. Dr. Moreau de Tours, of whom we have already spoken, approves of the colony in these words:—"Everywhere I have penetrated beneath the roof destined, by public charity or by private speculation for the abode of the insane. I have seen nothing analogous to Gheel."

In Italy, Dr. Biffi, of Milan, declares that this colony is destined to execute on a large scale a great reform in the treatment of the most terrible of maladies ; and that it would be folly to think that this could be accomplished without organizing there a medical body capable of leading the way in this important attempt. *It is this experience that science and humanity claim from so advanced a nation as Belgium.*

Dr. John Webster, of London, who has, more than any other physician, engaged himself in describing the asylums of the Continent, was much pleased with his visit to Gheel ; and his opinion too will shortly be published in the *Psychological Journal*.

Lastly, Dr. Willis directs, as it appears, a "Free Air" asylum at Great Ford, in England. Dr. Jessen directs a similar house at Hornheim, in Holstein: the patients even go to execute errands, and walk in Kiel. MM. Falret and Voisin possess one at Vanvres, near Paris, which approaches nearly to what we may regard as belonging to the system whose excellence we have attempted to describe.

In writing these lines we have discharged a duty of conscience. It is possible that error may have slipped in involuntarily under our pen; but never can that pen describe the torments that we have witnessed, and yet exist, in the cells and yards so strongly as they have been felt!

To resume. We believe that civilization advances only when egoism and falsehood retreat in the social world. This movement is evidently going on; if not in all countries, at least here and there. And this progress cannot be better measured than in the development of duty in the public conscience, especially towards the infirm and the insane, who might be deceived almost with impunity, if the moral sense did not everywhere interdict. The insane, then, are the dumb victims of our unworthiness, or the living witnesses of the degree of our true civilization.

ART. VIII.—PHYSIOLOGICAL PSYCHOLOGY.

No. IV.

BY ROBERT DUNN, F.R.C.S. ENG.

Continued from No. V., p. 156.

Intellectual Consciousness.—"A scientific psychology," says Waitz, "should exhibit the laws according to which the life of the human mind is evolved; that is, it should point out the common basis upon which *all mental life* rests, follow the threads by means of which all its phenomena are connected with each other, show the germs out of which they spring, and how they unfold themselves, into that multiplicity and richness of *inner life* which are manifested in the mature man."*

We have passed in review some of the leading phenomena of the sensational and perceptive consciousness, and attempted to specialize the nervous apparatus through which they are respectively manifested. We have seen that ideation is the first stage in our intellectual progress, and we have glanced at its general bearings, in relation to our composite nature, as animal, moral,

* *Vide* Waitz's Prospectus to his "Lehrbuch," quoted by Morrell in his "Elements of Psychology."

and intellectual beings. But knowledge that is *definite, exact, and communicable* belongs to a still higher phase of mental development than that of intuitive feeling and perceptive experience,—of the sensational and perceptive consciousness, which we have hitherto been considering. For in world-consciousness, as in self-consciousness, there is an individuality, an inward or subjective experience which is *unutterable and incommunicable*. The primary intuitions of all our perceptive faculties, even in regard to the phenomena of nature, but still more especially in respect to our social and moral relations, are closely interwoven with feeling, and, indeed, are often intensely felt, but on this very account they are *incommunicable*; for they cannot be *articulately expressed*, nor adequately conveyed by any system of signs from one mind to another. We can only judge of the intuitive feelings and perceptive experience of others by what we ourselves experience. No words can convey their equivalents; that is, can make others feel a sensation which we feel, or experience an inward light which reveals to us the primary elements of knowledge. There is, indeed, for the expression of absolutely individual feelings and emotions, a universal language, common to man and the lower animals—the language of Nature—*of inarticulate cries and of gesticulation*. The interjection comes nearest to this, but it has a certain amount of generality about it. In the case of the unfortunate deaf-mutes, the paramount importance of gestural language we see strikingly exemplified. To them, in their state of isolation and normal condition, left without the peculiar instruction which their situation requires, it is everything; independent of all conventional arrangements, and addressing itself principally, if not solely, to the sight, it is their only mode of communication with others. Thus, for instance, when they have beheld the raging passion of anger in another, and seen the swollen features, the distorted visage, the convulsed limbs; in a word, all the violence of action *visible* in anger, they can only tell of this to others by imitating the contortions and reacting the scene which they have witnessed. There cannot, indeed, be a doubt that “our minds are subject to a variety of feelings, and that the effects of these are visible in the features, attitudes, and gestures. . . Every distinct emotion has its appropriate expression, and thus a language *altogether independent of words exists*, displayed by the countenances and actions of man. Every person is aware of the bodily expression of fear, love, joy; and one can seldom ever mistake or confound the language of those with that of courage, hatred, or sorrow. Such language is immediately and instinctively recognised in every state of civilization, from the American savage to the most refined citizen. The haughty step,

the erect carriage, and disdainful look, are always sure indications of pride; in the timid gait and sidelong look fear is at once perceived; while agony is always too fearfully portrayed in the distorted looks and agonized features of severe suffering. This language addresses itself to the sight; the deaf and dumb therefore are able to avail themselves perfectly of its use; and thus it possesses for them, through life, always a charm which written language appears rarely to acquire.*

But knowledge, to be definite, exact, and communicable to others, must pass through the process of abstraction, and become embodied in the forms and symbols of the understanding, in fine, *in spoken or written language*. The intuitions of our perceptive faculties, *our idealized impressions*, which have been stored up in the memory as *mental images*, and *reproduced as representative ideas*, after having been associated, and when sufficiently generalized, have again to be projected out of the mind, to be externalized, and by the imaginative faculty, ideality, to be embodied in objective realities. But when once symbolized, or embodied in signs, our generalized ideas are no longer mere subjective representations; for, being thrown into fixed and significant types, which perform, though imperfectly, the office of abstract ideas, they exist in the mind, altogether apart from the region of immediate and inward experience, *as independent intellectual realities*; and, as such, become distinct and intelligible objects of contemplation, which can be placed at pleasure, either within or without the consciousness of the moment. In perception, as we have seen, ideation is effected in response to impressions made upon us *from without*, by virtue of the primeval harmony which exists between our perceptive faculties and external nature; but here *the mental process is reversed*, for the mind, separating itself from outward restraints, and impelled by its own inherent intellectual activity, by ideality, it embodies its inward images and representative ideas in objective realities. And this *objectifying* of our *inward or mental ideas* is all important to our progress in knowledge. For, "until signs are employed, our mental images are not held clearly apart; they merge, like dissolving views, into one another. Our life, in fact, without them, would be more like a dream than a waking reality—portions of a thousand different ideas perpetually combining with and melting into one another. Language, on the other hand, forms a new world, in which all our mental processes are *objectified*, held clearly apart, and not only made distinct to our-

* "The Deaf and Dumb; their Position in Society, and the Principles of their Education Considered." By W. P. Scott, M.D., Principal of the West-of-England Institution for the Education of the Deaf and Dumb. London. 1844.

selves, but so embodied as to be rendered likewise separate intellectual realities to other minds as well."*

When once, however, our intellectual activity, instead of *objectifying* our *inward images* in *existing outward* realities, constructs for itself the *sign, phonetic or visible*, for the embodiment of the *intellectual idea*—"the sign for the things signified"—the mind reaches a still higher phase of development. For in the construction and through the instrumentality of language the mind rises above feeling, above perception, above all the inward images of the imagination, and creating a new external world of its own, into which it transfers the phenomena of its inner life, it achieves the first step in the *freedom of human thought*. "In language, the sign, whether spoken or written, is *objective*; it appeals to the *senses*; it comes to us from the outward world, and is constructed from the elements of nature around us. At the same time, it has no natural meaning, and contains no thoughts apart from the mind which created or uses it. Its whole essence consists in its being the embodiment of an idea; in brief, *it is idea objectified*."†

Language is thus an intellectual instrument intermediate between perception and thought, and written notional words are the symbols or representatives of objectified ideas. All notional words, indeed, belong to the region of representative ideas, after these ideas have attained their most general character; and though words cannot excite the feelings like a gesture, nor warm the imagination like a picture, they are the indispensable machinery in the process of generalization and abstraction. Through them we grasp the essential elements which distinguish one thing from another, and classify our multifarious experiences. "In this way it is that they serve to construct the more general outline of knowledge. Hence the wonderful power which words possess on the whole process of thought; hence the capacity they attain, after the teachings of experience have paved the way, for expressing the very essence of the things to which they relate; hence, too, their use in forming a broad platform, on which the results of all the lower processes of mind are plainly recorded, and from which we can commence those higher forms of activity, which give to reason its all but infinite range and all but omnipotent force."‡

To the unfortunate, but educated deaf mutes, cut off from "hearing the mirror of speech," and denied the gratifications which flow from the interchange of ideas through the medium of "sweet sounds," written language is *speech in visible forms*, and written words, as the symbols or representatives of *objectified ideas*, are regarded by them as units, in the same way as we

* Morrell's "Psychology," p. 184.

† Ibid.

‡ Ibid.

regard letters, the various objects around them being so many simple objects of thought. "In the minds of the deaf mutes, written words," says Dègenèrado, "awaken the conception of things themselves, in the same manner as they awaken in ours the conception of sounds, with this difference, that polysyllabic words recal to them but a single idea, while to us they record a number of sounds at once." Nor can there exist a doubt that our alphabetic writing, losing its *phonetic* character, becomes to them truly *ideographic*.*

Their association, however, of ideas with written language must necessarily give to it a very different character from that which obtains with us, who enjoy the blessings of speech and hearing. So universal, indeed, is the practice of associating *ideas with sound*, it is not without difficulty that we can conceive the possibility of associating written characters with ideas without the intervention of sound. We learn to speak long before we learn to read or write; and thus, in the natural order of things, articulate sounds become the representatives of ideas, and written characters the representatives or symbols of sounds. Besides, hearing and sound are fitted to each other, and are in such intimate relationship, that hearing has been aptly designated "the mirror of speech." And thus it is, that while in articulate speech the mental image or intellectual idea, which has been moulded for expression in the organ of language, finds utterance by the lips, through the agency of the volitional power, the articulate sound—the spoken word—is reflected back, and returns again by *hearing* through the ears, first to the perceptive, and thence to intellectual consciousness.

The function of articulate speech is the exclusive prerogative of man, and language is common to all the races of man. It is the crowning gift of his beneficent Creator; "for to be without language, spoken or written, is almost to be without thought. We must not think, in a speculative comparison of this sort, of mere savage life; for the rudest savages would be as much superior to a race of beings without speech, as the most civilized nations at this moment are, compared with the half-brutal wanderers of forests and deserts, whose ferocious ignorance seems to know little more than how to destroy or to be destroyed. In our social intercourse, language constitutes the chief delight—giving happiness to hours, the wearying heaviness of which must otherwise have rendered existence an insupportable burden. In its more important character, as fixed in the imperishable

* Jerome Condon, a learned professor of Pavia, so early as the sixteenth century, says,—“Writing is associated with speech, and speech with thought; but written characters and ideas may be connected together *without the intervention of sounds*, as in hieroglyphic characters.—See “Journal of Education,” No. 6, p. 204.

records which are transmitted in uninterrupted progression from that generation which passes away to the generation which succeeds, it gives to the individual man the product of all the creative energies of mankind, extending even to the humblest intellect, which can still mix itself with the illustrious dead, the privilege which has been poetically allotted to the immortality of genius, of being 'the citizen of every country, and the contemporary of every age.' ”*

It is as natural for man, constituted as he is, and endowed with the faculty of speech, when vividly affected, to give expression, and to find utterance in articulate sounds, to his feelings, emotions, ideas, and thoughts, as it is for him voluntarily to use his locomotive powers in progression. But the scream of alarm, the shriek of horror, and the laugh of surprise, like the scowl of hatred, are *natural signs*, and *not conventional ones, like articulate words*. Still, thought and language are almost inseparably associated, and it has been well observed—"Were a family of men to be created by a miracle in a wilderness, they would, if similarly endowed like ourselves, *feel the impulse of the faculty of speech*, and soon learn, in the first instance, to comprehend each other's gestures and cries, and other signs of natural language, and ascend by these means to the exalted acquisition of an artificial language, by giving, step after step, conventional names to objects and actions, emotions and passions, generalizations and abstractions."† Thus, to the natural language of inarticulate sounds, gestures, and actions, would be added the conventional language of signs, until, in the fulness of time, alphabetical writing and the invention of printing *consummated* the benefits derived from the *noble prerogative of speech*.

Gall was the first to enunciate that the cerebral seat of the *faculty of speech* is in the anterior lobes of the brain; and since his time, as I have elsewhere observed,‡ a great mass of evidence has been collected in support of his localization of the organ.

"In 1848, two memoirs were read before the Académie Nationale de Médecine de Paris—one by M. Belhomme, 'De la Localisation de la Parole dans les Lobes Antérieurs du Cerveau;' and the other, by M. Bouillaud, entitled 'Nouvelles Recherches Cliniques Propres à Démontrer que le sens du Langage Articulé et le Principe co-ordonnateur des Mouvements de la Parole résident dans les Lobules Anté-

* Brown's Lectures on the "Philosophy of the Mind."

† "Memoir of Dr. Spurzheim." By A. Carmichael, M.R.S.A.

‡ Case of Hemiplegia, with cerebral softening, and in which loss of speech was a prominent symptom. By Robert Dunn, F.R.C.S. Read before the Royal Medical and Chirurgical Society of London, June 25, 1850, and published in the "Lancet," Oct 22 and Nov. 2, 1850.

rieurs du Cerveau,' containing new observations made by him since the date of his former paper, in 1839.

"The subject has undergone much discussion in France, and opposing evidence has been adduced. Andral* gives the particulars of two cases—one, in which loss of speech was the only cephalic symptom; and another, where it was complicated with hemiplegia of the right side, but the intellect was unaffected. They were both in old women, the first eighty, and the other seventy-three years of age. In the first case the speech was lost all at once, but not in a fit, three years before her death. She was never known to have lost her consciousness, nor the power of sensation or motion. Andral says—'Tout semblait nous annoncer que l'intelligence avait son intégrité. Dans les quatre membres, les mouvemens étaient libres, faciles, et la malade sentait bien les impressions douloureuses qu'on cherchait à faire naître sur la peau qui les recouvre. Lorsqu'on lui demandait si elle souffrait de la tête, ou si elle en avait souffert, elle répondait par un geste négatif. L'ouïe, la vue, et l'odorat, s'accomplissaient comme dans l'état normal.' At the autopsy, in the left hemisphere there was found a small ramollissement, of the size of a large pea—'Au niveau et en dehors de l'extrémité postérieure du corps strié tout-à-fait à sa pointe;' and in the right hemisphere a similar ramollissement—'A l'union de la moitié antérieure avec la moitié postérieure de cet hémisphère, à une égale distance de ces bords interne et externe, et au point de jonction des deux tiers supérieurs avec le tiers inférieur de la masse nerveuse située du centre ovale de Vieussens.' These were the only cerebral lesions. In the second case—'Dans tout l'encephale, il n'y a d'altéré que le corps strié du côté gauche.' It was a soft, pulpy mass to within three lines of its exterior surface. Andral observes—'Le siège du ramollissement est digne de remarque; il est exactement borné à l'un des corps striés, ce qui n'empêche pas qu'il n'y ait paralysie des deux membres et abolition de la faculté de parler.' Other cases have been recorded, in which the structural lesion was confined to the corpora striata, and a few in which the middle and posterior lobes were implicated in the disease of the striated bodies.

"But, in the consideration of this subject, it is never to be forgotten that the perfect power of speech—that is, the power of giving utterance to our thoughts and ideas in suitable and appropriate language, *depends upon the due relation between the centres of intellectual action, and of the encephalic motor centres, through which the volitional power is exercised.* Thoughts or ideas may be moulded for expression in the seat of intellectual action, but the due agency of the volitional power, to give them utterance, requires the integrity of the commissural fibres, and of the motor centres, through which the volitional impulses of thought operate in speech. The imperfect power of articulation which we so constantly meet with in hemiplegic patients, I have no doubt is owing to some structural lesion in the integrity of the motor centre of volition; and hence does it not necessarily follow that loss of speech or power of utterance will alike result from *disease of the*

* "Clinique Médicale—Maladies de l'Encephale, Vol. v. p. 454.

anterior lobes, or of such parts of the corpora striata as are in direct relation with them?

"There is not, I believe, a single instance on record in which the power of utterance was retained *intact*, however sound and healthy the great hemispherical ganglia may have been found, where the corpora striata were both diseased. The apparently conflicting evidence which has been adduced as to the seat of the faculty of speech admits of a satisfactory explanation, when thus considered in relation to the centres of intellectual action and the motor centres of volition."

I brought this view of the subject under the notice of the Royal Medical and Chirurgical Society in a paper, "On a Case of Hemiplegia with cerebral softening, and in which the loss of speech was a prominent symptom," read June 25, 1850,* and I may here reiterate, my own mind rests in the conviction, that the amount of pathological and other evidence which has been amassed, irresistibly establishes the position of Gall, as to the site of the organ of the faculty of language in the anterior lobes of the brain, and that the power of articulate speech, that is, of giving utterance in appropriate language to our thoughts, feelings,

* The case was that of a lady advanced in years, who had suffered from three attacks of apoplexy. The first occurred in October, 1844, seemed "congestive" in its character, and passed away without any other permanent consequences than this, that she continually used one word for another, not applying appropriate names to the things or persons she desired to signify. The second attack, in May, 1847, left her permanently hemiplegic on the right side, the power of voluntary motion being completely abolished, and but little sensibility being preserved, though reflex movements could be excited, in the lower extremity, by tickling the sole of the foot. For the remainder of her life she remained altogether *incapable of speech*, not being able to say *yes* or *no* in reply to a simple question, and never getting beyond the utterance of the monosyllable *dat-dat*; yet all her senses were intact; *the motions of the tongue were free, and there was no difficulty of deglutition*. She did not seem to have lost any of her intellectual powers; but her emotional sensibility was rather increased. Her general health continued good up to the time of the last fatal seizure, which occurred in April, 1850, without any premonitory symptoms.

At the *post-mortem* examination, the upper two-thirds of the *anterior lobe* of the *left hemisphere* was found to be in a state of complete destruction, with colourless softening; while the middle and posterior lobes were sound and healthy. The *right hemisphere* was healthy; but the greatest change was in the ganglionic masses, at their base, and in the commissural structure. The upper half of the corpus striatum on the *left side* was destroyed by softening; the optic thalamus was shrunken to less than half its natural size, its upper surface being greatly wasted; while, on the *right side*, a small and recent apoplectic clot was seen on the upper and anterior surface of the corpus striatum, the whole of the upper half of which was in a state of *ramollissement*; while on the outer surface of the thalamus also were noticed some indications of white softening. The corpus callosum was destroyed, except at its anterior and inferior reflexion, and the anterior commissure and fornix were gone. Microscopic examination of the softened parts presented an abundance of compound cells and of fatty matter in the capillaries. In this case it is quite evident that, with the disorganization of the left anterior lobe, its functional power was entirely abolished; and though the right hemisphere was healthy, and there is every evidence, from the history of the case, that it maintained and exercised its functional power as a centre of intellectual action, still the volitional agency was *wanting to give utterance to the passing thought*, for the corpus striatum on the same side was not in its integrity.

and emotions, requires the integrity of the *corpora striata*, and their commissural fibres, as the motor channels, through which the will or volitional power operates in speech. A striking and instructive illustration was presented, in the young woman's case to which I have so frequently alluded, of the dependance of the power of utterance in articulate speech upon the due relation between the centres of intellectual action and of the motor centres, through which the will operates in speech. In her case, the perfect integrity of the *corpora striata* was abundantly manifest, for they were in the full play of their functional power, as *motor centres*, but she was *speechless* so long as the perceptive and intellectual faculties were in abeyance. Ideas, indeed, are the pabula of thought, and articulate speech is the interpreter and minister of thought. As we are now constituted, our thoughts are invariably clothed and find utterance in speech; but without ideation, without mental images and representative ideas, there could be no thoughts; and *without thought language would cease*. But thought there may be, and in the case of the unfortunate and uninstructed deaf mutes, thought there is, independent of, and without language. Nay, without speech, man, by virtue of his perceptive organs, and intellectual faculties, can observe objects, and mentally arrange, associate, and form them into groups. He can judge of their properties and qualities,—compare them, and even deduce inferences;—but how weak and incomplete are these processes of thought when language is wanting! Without language the mighty triumphs which science has achieved over nature would have been impossible; and without the machinery of words, how limited and contracted would be the process of generalization and abstraction! Language implies a train of thinking. We reproduce in speech the mutual relations of objects, the relations of our thoughts to objects, and, the order and relation of our thoughts themselves. Words, as we have seen, are purely conventional; they have no natural meaning of their own, and contain no thoughts apart from the the mind, which created and uses them.

They are, in fact, the final expressions of that mental process as well as the depository of its final results, consummated through the instrumentality of the faculty of language, by which knowledge becomes *definite, exact, and communicable*, and through which the mind, elevated above the region of mere ideation, increases in intellectual activity and rises to a higher phase of development—that of *thought and reason*. Logic expounds the *laws of thought and the art of reasoning*. But, as the *instrument of thought and reasoning*, the value and importance of language cannot be overrated. For language implies a train of thinking;—it is the circulating medium of our thoughts—

the minister of thought and its interpreter. Words are the materials of thought. For our mental images, *reproduced* in the memory as representative ideas or conceptions, when embodied in the conventional symbols of words, become *fixed and definite objects of thought*, and such they are to *all* who use them. Nay, according to Leibnitz, words are sometimes more than the signs or symbols of thought—they *become thoughts*. Such are his *symbolical cognitions or conceptions*. Among all the races of man, the instinctive impulse is irresistible to give utterance in articulate sounds to his feelings, emotions, and thoughts; and not only to fix upon articulate sounds, or names, as the representatives of his *intuitive cognitions or conceptions of things*, but also to find expressions for *the different qualities and states of things*. From such beginnings, “to all the uses and powers of articulate sounds and artificial language, how exalted is the ascent! how immense the efficacy and enjoyment possessed by man! the intercommunion of minds in social or scientific converse—the force and perspicacity of argument advanced to such a degree by general terms and intellectual abstractions—the strains of poetry, inculcating piety, magnanimity, and virtue—the thunders of eloquence, commanding the destinies of nations, and involving in its splendid career the interests both of time and eternity.”*

The constructive faculty of language in continuous speech, involving, as it does, *the power of combining words together*, so as to express the mutual relations of objects—the relations of our thoughts to objects, and the order and relation of our thoughts themselves, thus enables us, through our reasoning and reflecting faculties, to judge explicitly of these relations, and to frame a method by which our judgments may be articulately expressed. And in this way it is that continuous speech becomes moulded, step by step, into a complete organ of thought, and that “a sentence or proposition in language answers to a complete thought in psychology. By a *complete thought*, in the sphere of the understanding, is meant, a *distinct act of comparison between two terms, in which we apprehend the relationship that exists between them*. All logical or formal thought answers to this explanation; and *the mental activity*, by which we compare terms, find out their exact agreement or disagreement, give expression to this in propositions, and deduce other propositions from them, is that which, *par excellence*, bears the title of THE UNDERSTANDING.”†

* Carmichael, *ante cit.*

† Morrell's “Psychology.”

(To be continued).

ART IX.—ON MARRIAGES OF CONSANGUINITY.

By S. M. BEMISS, M.D., of Louisville, U.S.A.*

“ They breed in-and-in as might be known ;
Marrying their cousins, nay, their aunts and nieces,
Which always spoils the breed if it increases.”

SOME facts illustrating, in a remarkable degree, the evil results of marriages of consanguinity, fell under my observation several months ago, and determined me to collect others of a similar character, and endeavour to arrange them in such a form as to warrant some definite conclusions upon this important subject. The collection of original facts connected with these marriages is a matter of difficulty and delicacy, and oftentimes as disagreeable as it is difficult and delicate. We can seldom gain information in reference to their history and results from any source so exact and reliable as from the family itself ; and such is frequently the secrecy observed by relatives in regard to these revelations, that we are unable to obtain statistics sufficiently minute to afford a basis for positive conclusions. Such statistical information as my paper contains may, however, be relied upon as strictly correct ; for I have at once rejected all presented to me in such a manner that I was not able, from my knowledge of the informant, to endorse as entirely to be relied upon. One other difficulty met with in a comprehensive presentation of this subject, is the poverty of its literature ; for, though long and able treatises have been written upon the best methods of preventing or arresting deterioration of domestic animals, by the introduction, from time to time, of new crosses into their respective breeds, yet the question of degradation of numerous families of the human species, by neglect of similar counteracting influences, has rarely been a subject of literary or medical discussion. Nevertheless, the opinion is strictly tenable, however humiliating it may be to our pride, that the rules which govern the procreation of species are not essentially different in man and domestic animals. This want of medical research upon the subject in question does not proceed from the novelty or recent origin of the truth just stated, for Rilliet has well observed, “ no one can claim priority of the idea, when its antiquity is such that we cannot trace it to its source.”

In primitive ages, marriages between near blood relations were occasionally necessary to the perpetuation of the race ; but it is very probable that their abuse led to the early enactment of laws

* From No. I. of the “ North American Medico-Chirurgical Review,” January, 1857. Philadelphia.

to establish the degrees of consanguinity beyond which marriages might be consummated without fear of perverted sanitary condition in the progeny. It is by no means an ascertained fact of history, that these early laws of incest owed their origin to physiological observations; but it seems to me entirely reasonable to infer that, witnessing the pernicious effects of such unions upon offspring, first suggested the establishment of laws to prevent the continued repetition of the evil. Those were ages in which physical force had not been superseded by the inventions and mechanical appliances of the present day; and the power of a community was measured by the amount of muscle under its control. Legislators who contended that "walls of men were better than walls of stone," would certainly exercise the most sedulous care to maintain, so far as practicable, the physical integrity of their people. In further proof of this inference, Socrates, when inveighing against the incestuous marriages that were sometimes practised at Sparta and Athens, says, he regards them as "prejudicial to the healthy propagation of the species."—(Rilliet.)

The laws of Moses interdicted marriages within the third degree of relationship. The Roman laws were more strict in this respect in former than in later times. Plutarch says, "In ancient times the Romans abstained from marrying their kinswomen in any degree of blood; as they at present forbear their aunts and sisters. It was late before the marriage of cousins-german was dispensed with."—(Janeway.) The Catholic Church, at an early period, opposed itself to blood alliances. Pope Gregory the Great, in proscribing such marriages, gives, like Socrates, a physiological reason: "*Experimento didicimus ex tali conjugio sobolem succrescere non posse.*"—(Rilliet.)

References may be found to the unfortunate influences of marriages of consanguinity upon offspring, in various medical works of the previous and present century,* but no facts are adduced to support the conclusions of the authors: nor have any statistics, illustrating these effects, been presented to the profession, so far as I am aware, except some facts included in Dr. Howe's valuable reports on idiocy.

By much labour, I have obtained statistical accounts of thirty-four marriages of consanguinity. Of this number, twenty-eight were of the third degree of the civil law, or between first cousins; and six were of the fourth degree, or second cousins. Of the total number of marriages, twenty-seven were fruitful and seven sterile. The twenty-seven fruitful unions produced one hundred and ninety-one children. In only thirteen of these marriages was the sex of the offspring reported, giving forty-nine males to

* Mason Good, Combe, Barlow, &c.

forty-two females. Of the twenty-eight marriages of the third degree of relationship, twenty-three were fruitful and five sterile. Of the six marriages in the fourth degree, four were fruitful and two sterile. In both these latter instances of sterility, the female was the product of a marriage of consanguinity. The relative proportion of children to the total number of marriages was 1 to 5.6. The average fecundity to each fruitful union was seven and a slight excess. The average births to each fecund marriage in the third degree of kinship was 6.87, nearly. The average number of births in the fruitful unions of the fourth degree was $8\frac{1}{2}$.

Of the 192 children resulting from these marriages, 58 perished in early life. In 24 of the 58 deaths, the causes are stated as follows:—of consumption, 15; of spasmodic affections, 8; of hydrocephalus, 1. Of the 134 who arrived at maturity, 46 are reported as healthy; 32 are set down as deteriorated, but without absolute indications of disease; and 9 are returned without any statement as to health or condition. The remaining 47 all possess such abnormalities as to render them the subjects of particular observation. These are classed as follows:—23 are scrofulous; 4 are epileptics; 2 are insane; 2 are mutes; 4 are idiots; 2 are blind; 2 are deformed; 5 are albinos; 6 have defective vision; and 1 has chorea.

In point of fecundity, these marriages probably present results not differing materially from the average fertility of marriages in the rural districts of the West. I do not know of any rules by which to determine the average number of births to a marriage among our country population, but I do not doubt they will equal in fruitfulness the most prolific portions of Europe. In some villages of Scotland, the proportion of births to a marriage is stated to be seven. (Cy. Pract. Med.) The parties to the above intermarriages were, with one or two exceptions, of rural habitation; were, in many instances, remarkable for mental and physical development; and were surrounded, in a large majority of cases, by circumstances of living calculated to ensure the utmost degree of fruitfulness and prolonged life.

These statistics, then, I am satisfied, exhibit results on this account more than usually favourable to the offspring. In support of this opinion, we may contrast this report with Dr. Howe's observation of seventeen marriages of blood relations, in his report on idiocy. These seventeen marriages gave "birth to 95 children, of whom 44 were idiots, 12 scrofulous and puny, 1 deaf, 1 dwarf—58 in all, of low health or imperfect—and only 37 of even tolerable health." An unusually large number, over one-fifth, of the marriages in my report, were sterile; and I am not aware that this can, in any instance, be imputed to other causes than the

influence of consanguinity. Some of the parties to these sterile unions have had excellent corporeal and mental endowments, and have arrived at unusual longevity. In four instances reported to me, females descended from these intermarriages have proved barren without exhibition of constitutional defect. In two of these instances, they had married relatives; in the other two, they married without the circle of family affinity.

I shall not attempt to offer any hypothesis as to the active cause of sterility in these cases; it is a subject in reference to which physiological reasoning has, up to the present time, furnished no satisfactory results. We cannot force our researches into the hidden penetralia of nature, and there discover how her processes of reproduction are so interfered with as to render these intermarriages disastrous to their issue; nor by what means she avoids these unfortunate results, by rendering many such unions fruitless. We must leave the development of this subject to the future physiologist; if, indeed, the sea of human knowledge shall ever extend its limits in this direction.

I come now to speak of the defects of the offspring, in the cases alluded to. I have no doubt that the number of cases of scrofula is larger than the same number of descendants of marriages of consanguinity would ordinarily exhibit. This predominance of scrofula probably results from the fact that, in three of the families, there is reason to suspect the previous existence of strumous taint. These families alone yield sixteen cases of scrofula. This fact, and the large proportion of the deaths ascribed to phthisis, demonstrate the truth of Dr. Barlow's observation, that the tuberculous diathesis "shows itself, in the greatest intensity, in the offspring of marriage between relations in whose family the taint has already existed."

I have not obtained sufficient information to enable me to describe the particular manifestations of scrofulous diathesis in each individual case; some of them are, however, represented as scrofulous ophthalmia.

Rilliet places epilepsy first in order of frequency, of the diseases of the nervous system to which the product of family intermarriages are most liable. My report comprises four epileptics, the father of one of whom was likewise the result of a marriage of cousins. Eight of the deaths are ascribed to spasmodic affections, and four of this number are specified as epilepsy.

I have no information in regard to the degree or character of mental aberration of the two insane subjects contained in the enumeration. The two cases of muteism were congenital, and will be again referred to, as will also the four cases of idiocy.

I am not informed whether the two cases of blindness were congenital, or produced by causes occurring after birth: they,

however, both occurred in the same family, and were, in all probability, congenital.

The cases of deformity were, in one instance, curvature of the spine; in the other, malformation of an arm. The six cases of defective vision were myopia, and the results of scrofulous ophthalmia.

It now remains to notice the most remarkable of all the abnormalities of offspring my report presents. I refer to albinism. Absence of the pigmentary cells of the integument and coats of the eye is, undoubtedly, like most other deviations from the normal type of reproduction, a mark of deterioration. But albinism sometimes occurs where there is no cause or condition, apart from its own manifestation, to lead us to infer degradation; and, having once occurred in a family, the influence of maternal emotion might have much to do with its repetition. It may exist in connexion with a moderate state of corporeal health, and a striking development of intellectual sprightliness, as in some of the subjects of my report. In domestic animals, it is so well understood to indicate impaired value, that connoisseurs in horseflesh reject such animals as have absence of colouring pigment in the hair and tegumentary tissues. M. Siécle's* observations upon albino cats led him to conclude that it was, in this animal, uniformly attended by absence of the auditory sense. No defect of hearing has accompanied its presence in the subjects of my report. Almost all the albinos here included are near-sighted. Esquirol also mentions an albino who was certainly myopic, and another whom he supposed to be. I am not aware that any author has spoken of this condition as the result of in-and-in marrying; but Esquirol states that, wherever we meet with albinos, there we also find the goitrous and idiotic; and these latter are known to be common products of marriages between kindred. From Dr. Howe's investigations upon this subject, it is safe to infer that idiocy is oftener the result of this cause than was heretofore suspected. In Dr. Howe's report, seventeen out of 359 idiots were found to be products of marriages of consanguinity. If the same ratio held good throughout this country, there would have been, in 1850, 747 idiots in the United States, the offspring of parents connected by blood-ties.

Congenital deafness is another impairment common to the products of marriages of this character. M. Meniese, physician to the Imperial Institute for the Deaf and Dumb, at Paris, considers this infirmity, when congenital, more often referable to this cause than to any other. My inquiries have not, thus far, led me to a similar conclusion; but its great frequency among the offspring of such marriages cannot be doubted. A writer in

* "London Medical Times vol. xviii., p. 123.

the "National Intelligencer," some years ago, stated that "a great proportion of the inmates of the asylums for the deaf and dumb, the blind and idiotic, are found to be the product of the intermarriages of cousins." Then, if we add to the 747 idiots, the mute, epileptic, blind, and insane products of these marriages, computing the number at the very lowest probable figure, and sum together the whole, we shall have, resulting from this physiological error in the United States, not less than *two thousand* victims, whose conditions are, for the most part, irremediable; besides a much greater number suffering from other impairments of constitution entailed upon them by the same cause. Truly,

"Democritus did well to laugh of old :

Good cause he had, but now much more ;

This life of ours is more ridiculous

Than that of his, or long before."

I am aware that many circumstances may produce defective issue besides the influence of consanguinity, such as the habits of the parents, and their particular condition at the period of approach. Maternal emotion or constitutional derangement during pregnancy may also frequently determine the character of the offspring. But these accidental influences are not more likely to prevail in marriages of consanguinity than in those of a different character; while the number of departures from a healthy standard in the issue of these marriages is incomparably greater than in those where no such connexion exists.

To prove still more certainly that these various impairments of offspring are due to the influence of too frequent admixture of the same blood, we have only to associate the cases in my report in the various degrees of relationship, and observe if the proportion of accidents to the offspring is increased with the degree of relationship. To arrive at this point, I shall divide the productive marriages in my report into three classes—those of the fourth degree, or between second cousins; those of the third degree, or between first cousins; and those nearer than the third degree, as between double cousins, or between cousins, themselves the descendants of cousins. The table will stand thus:—

Degree.	No. of Marriages.	No. of Children.	Died.	Diseased.	Deteriorated.	Healthy.	Unknown.
4th degree . .	4	34	8	6	10	10	
3rd degree . .	19	130	37	31	17	36	9
2½ degree . .	4	27	13	5	6	3	

It will at once be seen that the percentage of calamitous results to the progeny is largely increased as the relationship becomes closer. I have also accounts of two marriages in the second degree, or between uncles and nieces; but they have not been consummated sufficiently long to determine their results.

I now propose to notice briefly the circumstances calculated to modify the effects of marriages of consanguinity, either in lessening or aggravating their evil results. That these marriages are sometimes practised without apparent ill consequences to the offspring, is obvious to all whose attention is drawn to the observation of these points. Under what circumstances, then, may they be expected to be followed by healthy offspring? Is it when, as Mercatus has advised those entering upon matrimony, the parties are of opposite temperaments? I incline to the opinion that this, with some other circumstances to be mentioned, has great influence in determining the results. Baillou has remarked, that "parents transmit to their children disease as well as wealth, but the former much more certainly than the latter." (Stille's *Pathology*.) This remark is probably equally true with regard to points of temperament and types of physiological idiosyncrasy as to predisposition to disease. In truth, predisposition to disease may often consist in a hypermanifestation of certain constitutional peculiarities. Nature seems to have designed that the conditions and tendencies of human organisms should be kept very nearly in a state of equilibrium. This equipoise, necessary to the healthy condition of man, upon whatever inexplicable cause it may depend, may be readily disarranged by giving undue predominance to any particular constitutional phase. The slighter deviations from a normal mean would constitute individual or family peculiarities; while more marked perversions become morbid manifestations, and infirmity results. As in the moral man none are exempt from the taint of sin, so in the physical man each individual of our race has his obliquity towards disease—generally, perhaps uniformly, towards some particular disease. It is, then, reasonable to expect that when two individuals marry who possess the same morbid proclivity, their offspring will exhibit that identical divergence, but in a much more marked degree. Thus, undoubtedly, have originated many family peculiarities, perverted tastes, and morbid diathesis. The circle of individuals thus constituted sometimes includes large communities, as is observed in reference to the disease denominated Plica Polonica, which attacks the Polish and spares the Russian peasant living under external circumstances equally liable to produce the malady. (Pritchard.) There is no better mode of maintaining this happy mean of temperament than by admixture of types of constitution possessing no family identity. We

may possibly, and justly, think with Benton, that "it hath been ordered by God's especial providence, that in all ages there should be (as usually there is), once in 600 years, a transmigration of nations, to amend and purify their blood, as we alter seed upon our land; and that there should be, as it were, an inundation of those northern Goths and Vandals which overran, as a deluge, most parts of Europe, to alter, for our good, our complexions, which were much defaced with hereditary infirmities, which, by our lust and intemperance, we had contracted."

History presents some instances altogether antagonistic to the doctrine of degradation from this cause. Especially does Sacred Writ offer some cases, of such remarkable emphasis, that it would be extremely difficult to explain the non-sequence of deterioration of offspring, if the rule by which our contemporaries are measured were equally applicable to them. Abraham, Isaac, and Jacob, all married wives connected to them by blood-ties; and yet they were the chosen progenitors of a privileged and highly-gifted people, and nothing pertaining to their history suggests the idea of immediate degradation of progeny. A very learned divine has explained to me this seeming contravention of a natural law, by the supposition that, as the Jews were a people chosen for an especial purpose, they existed under abnormal conditions, and all influences ordinarily enuring to their prejudice were providentially countervailed. This presumption is certainly plausible; and as we see the same people protected in future trials by miraculous interposition, the argument may be entertained without violence to reason. But without presupposing the exercise of supernatural influences, the apparent inoperativeness of this law of degradation by in-and-in marrying, in the above instances, as well as in those of Adam's sons and daughters, may be explained by the incomparably superior endowments of these primeval denizens of our globe. Those were days in which man dwelt as it were in the presence of his Creator; "when," as Schlegel observes, "God familiarly taught man the rudiments of speech, as a parent teaches a child." If those ancient patriarchs were found worthy of these high honours, and if they could ordinarily attain to a longevity many times beyond that to which our most perfect organizations can now arrive, how immeasurably superior to ourselves must we suppose them to have been in vigour and excellence of constitution! They were thus enabled to propagate the race by alliance with their own blood, with no such baneful results as similar causes now call forth. But it is not necessary to believe that such unions were even then exempt from pernicious effects, but in their perfect condition of corporeal organism, and freedom from predispositions to disease, the deterioration of race resulting from

this cause was probably exhibited in the lowering of the vital powers and simple abbreviation of life, rather than in demonstrations of the diseases of the present day. We still see these very same circumstances of constitution and condition counteracting, to a limited extent, the evil tendency of this cause. In the early settlement of the West, the inhabitants were, for security, gathered into communities of greater or less magnitude, separated from each other and from the older States by miles of dangerous wilderness. It was natural that each community should be composed in a great degree of blood relations, since, in forming companies for migration, the several branches of one family would often combine. When in their new homes, a scarcity of marriageable material would often render unions between relations expedient, and afterwards, these covenants, arising at first from necessity, became a habit, often convenient in some respects, since it preserved estates within the family circle. But these pioneers were a hardy, robust people, living much in the open air, and undergoing vigorous exercise; having for their aliment wild game and the fresh products of a genial soil, and not addicted to any habits calculated to impair the integrity of their well-endowed constitutions. We would naturally expect conditions of life so favourable to the sound development of the bodily organism to overrule all counteracting influences, and it might prove almost the exception, when marriages of consanguinity gave origin to defective issue. Not so, however, among the valleys of the Alps, where, from the barriers formed by impassable mountains, the same seclusion of communities and frequency of family alliances are found to exist. There, with impure air, bad diet, and constitutions infected for generations with hereditary taints, it proves an exception when a healthy child is born from parents of the same blood. There we find goitre, cretinism, scrofula, albinism, and mutism in their most aggravated forms.*

In this country, the Jews, whose religion forbids them to marry except with their own race, are often driven, from the scarcity of marriageable subjects in their communities, to form alliances with their own kindred, and a physician of distinction informs me that they are peculiarly liable to strumous taints and congenital defects. In this connexion it may also be of interest to mention Bayard Taylor's observation, that the Jews of America are far inferior in personal appearance to the Jews of Palestine. These same social conditions and connubial exigencies exist also

* It may be proper to remark, in this connexion, that there is within a few miles of this city a child, the issue of cousins, whose cranial bones have undergone the rachitic softening so frequently observed among the cretins and idiots of the Alps.

among the free coloured inhabitants of the Northern States, and may account for the increased ratio of deaf and dumb, blind, and insane, found in this population.—*Comp. U. S. Census* 1850, p. 77.

Wherever in-and-in marriages are practised under circumstances of life calculated to annul their tendency to deprave the offspring, we see a prominence given to certain points of physiognomy, which constitute striking marks of resemblance, not only evinced in families, but sometimes found to pervade a numerous nation. Thus, Hippocrates states that the Scythians all resembled each other, although they were different in appearance from all other people. The Jewish face has, under favourable circumstances, retained its characteristics from the earliest ages to the present day.

History will, I think, sustain the opinion that the most vigorous people have sprung from the ingrafting of nations differing in constitution and temperament from each other. I believe, with an observing writer, that the extraordinary activity and energy of the American people are due to the composite nature of their blood. This rule, however, seems subject to some qualification; for there certainly exist strong reasons to believe that matrimonial alliances between the greatest possible contrasts to be found on our globe—the negro and Caucasian races, for instance—are not favourable to the most vigorous propagation of species. I do not look upon mulattoes as hybrids, but think they exhibit less of vigour and vital force than are found in crosses where there is less contrast. Mr. Alexander, perhaps one of the most experienced cattle-breeders of the world, has observed that the cross between the finest and coarsest breed of cattle is far inferior to that between the best blood, and a medium between that and the worst.

The prevention of the serious evils I have under consideration, which, of course, consists in the prevention of in-and-in marriages, is a point which I do not think is to be attained by the enactments of civil laws bearing upon the subject. It would prove equally difficult to convince either legislators or communities that there could be a necessity for going beyond the requirements of the Levitical law. It is, however, the duty of physicians to labour unremittingly in the collection of facts pertaining to this subject, and to submit them to the public. A reasoning man will refrain from a connubial association likely to inflict irreparable injury upon his offspring, after he has learned that such is the fact; and church governments will forbid their clergy to celebrate nuptials which they find tend to the abasement of the species, and the subversion of God's beneficence to mankind. As previously stated, the Catholic Church has already discouraged union in any near degree of blood affinity. We have no means of ascertaining, by reference to masses of population,

the effects of this prohibition in diminishing the congenital occurrence of such defective offspring as my report presents. It has been attempted in Europe, as Rilliet mentions, with results favourable to Catholic populations. Quetelet's computation of the ratio of deaf and dumb to the whole population is precisely the same in both England and Italy. M. Meniese states that at this day every trace of this interdiction of the Church has disappeared. "Pendant une longue suite de siècles, le mariage fut absolument interdit à tous les individus parents à un degré quelconque, l'Eglise se réservant le droit d'enfreindre la règle posée par elle-même dans les rares circonstances dont elle voulait apprécier la valeur ; mais ces rigueurs de la discipline furent sujettes, comme toute autre chose, à un relâchement déplorable, et aujourd'hui toute trace de ces interdictions a disparu."

The facts offered in my paper are much too meagre to afford a basis for positive conclusions, but I think it is a step in the right direction, and will at least serve as a guide for other inquiries on this subject. I have, in the last few days, learned, with much pleasure, that Dr. John Bartlett, of Keokuk, Iowa, is now collecting facts for the publication of an essay on this subject. We may congratulate the profession that such an earnest and indefatigable lover of science has taken the subject in hand. The attention of the public press is somewhat, but not sufficiently, awakened to the importance of this subject. The Ohio Legislature, much to the credit of her physicians and lawgivers, passed at their last session a law requiring the assessors throughout the State to collect the facts connected with marriages of consanguinity and certain defects of offspring, and report them. These statistics will furnish a sufficient amount of testimony to establish beyond cavil the character and degree of influence these marriages exert upon offspring, and the profession will await with much anxiety the publication of this most important addition to our vital statistics.*

* The following is a copy of the Act referred to :—

"An Act to ascertain the Number and other Facts respecting Deaf and Dumb, Blind, Insane, and Idiotic Persons, in the State of Ohio.

"SECTION 1. Be it enacted by the General Assembly of the State of Ohio, That the Assessors in the several townships of each County of the State, while performing their duties, shall ascertain and enter upon a schedule prepared for the purpose, the name, in full, of each deaf and dumb, blind, insane, and idiotic person in the township, together with the age, sex, colour, occupation, and place of birth of said persons, and whether educated or not ; also, the names, in full, of the parents of said deaf and dumb, blind, insane, and idiotic persons, their place of birth, occupation, number of children, number of deaf and dumb children, and what affinity of blood, if any, existed between the parents previous to marriage ; and that said papers be returned in due form to the Auditor of the proper County, at the time of returning the assessment of property, and by the said Auditor to the Secretary of State, on or before the first day of July, 1856. The Auditor of State shall furnish to the several County Auditors the necessary blanks or schedules to carry out the provisions of this Act."

For reasons too apparent to be indicated, I am compelled to forego the satisfaction of an individual expression of thanks to many friends, both in and out of the profession, for the assistance they have kindly rendered me in the collection of facts upon this subject.

ART. X.—PATHOLOGY OF INSANITY.

Based on the *Post-Mortem* Examinations in Bethlehem Hospital.

BY W. CHARLES HOOD, M.D.

Resident Physician to Bethlehem Hospital.

THE following seven reports of post-mortem examinations represent, to a great extent, the mortality in Bethlehem Hospital during the years 1855 and 1856, and may be considered a continuation of similar reports previously communicated to the "Psychological Journal," by Dr. Webster. In the present series a short medical sketch of the patient has been added, with a view to render the cases more interesting, and possibly more instructive, than the bare extract from the Autopsy Book, without any clue to the psychological character of the case or treatment of the disease that had proved fatal.

Three of the following reports refer to criminal lunatics who died while under confinement in Bethlehem Hospital. Hitherto no reports have been made from this class of patients, owing to the restriction imposed by the authorities at the Home Office; but permission has recently been granted by the Secretary of State for the Home Department to include in this and future autopsies, reports of those cases of criminal lunatics who die in the hospital.

1. T. C. P., a male criminal lunatic; resident in the hospital nineteen years; died aged 55. Had been an idiot from childhood; during his residence in the hospital his behaviour was generally quiet and tractable, but subject to occasional paroxysms of excitement, when he became destructive, noisy, and dirty in his habits. These attacks lasted a few weeks, and were followed by months of tranquillity: he was very deaf; had great difficulty in articulation, his language being little more than a noisy jabber of incoherent sounds. His habit of body was most obese, and his temperament phlegmatic; his physical health was generally good, requiring little medicine except aperients, but those of a drastic character. On the 3rd of June, 1856, he was attacked with erysipelas of the face and scalp, from which he died on the 13th of the same month.

Autopsy.—The skull-cap very thick, and of small dimensions; posteriorly very broad. The brain small but well developed, of

firm consistence, and the parts at the base clearly distinct. The ophthalmic arteries were loaded with atheromatous deposit, and the same condition, in a less degree, was observed in the basilar artery and the other arteries at the base of the brain.

The abdominal parietes consisted chiefly of a great thickness of fat; the intestines were loaded with fat, and the muscular colour of the heart concealed by its being imbedded in adipose tissue. The thoracic and abdominal viscera were all healthy, with the exception of slight old adhesions in the anterior part of the right pleura.

2. C. S., a male criminal lunatic, who voluntarily confessed a murder he had perpetrated; was tried, convicted, and acquitted on the ground of insanity. Resident in the hospital three years, and died of exhaustion following acute mania of one week's duration. Previous to this attack of mania, which came on without any observable exciting cause, he had been quiet and inoffensive, avoiding the company of others, and refusing all conversation with his companions. On three occasions during the last year of his life he obstinately refused his food, until it was considered necessary to administer it to him with the stomach pump. To the operation he submitted without opposition, and at the next meal readily took his food.

Autopsy.—Fifty hours after death.—Body emaciated; several bruises and small scars over various parts; skull-cap rather thin, especially posteriorly; brain soft; membranes apparently healthy; lungs, heart, kidneys, healthy. There was a tumour about the size of a goose's egg attached to the fascia, and lying on the left side between the internal edge of the psoas muscle and the external border of the left iliac artery, apparently of a cartilaginous character.

3. J. R., a female patient, aged fifty, died of phthisis, having been resident in the hospital eleven months. On admission she was suffering from mania, with delusions. Her conversation was incoherent and rambling, frequently and abruptly commencing singing in behalf of the rights of women and children. Her delusions consisted in a belief that her inside was composed of iron and steel, for which reason she was to be divorced from her husband. During the first two months her excitement was to some extent governable by change of room or occupation, and allowing her to roam about the airing ground unrestricted by the company of other patients. Subsequently she became more and more violent, mischievous, and destructive; her habits dirty in the extreme; conversation filthy; and she continued in this state to the day of her death. During the early stage of her disease, the excitement was in some measure allayed by tartarized antimony, in half-grain doses three times a day; the effect was only

temporary, and no medicine of either a sedative or depressant character afforded any permanent benefit. During the long period of excitement she was sustained by a generous diet, without stimulants.

Autopsy.—Nearly all the parts, both external and internal, were in a highly anæmic state. The blood-vessels of the head, both external and internal, were empty. The cellular tissue of the scalp and face was infiltrated with a semi-fluid and slightly opaque effusion. The cerebral substance generally soft, but without morbid change; a little fluid in the lateral ventricles. The left lung healthy in structure, connected to the parietal pleura by general old and strong adhesions. The right lung presented one adhesion only, of small extent, the rest of the surface being quite free. It was healthy in structure, except at the posterior part of each lobe, in which there had been inflammation, with congestion, partial consolidation, and suppuration. The matter, thick, healthy in appearance, and free from unpleasant smell, was collected in small abscesses. There was one in the upper lobe, containing about a teaspoonful of pus, and three in the lower lobe, from which a tablespoonful flowed. The pus in each abscess had advanced to the surface, so as to be visible by its yellow colour; but the lung had not become adherent.

No diseased change was observed in the abdomen, from which, as well as from the thorax, all adipose structure had disappeared.

4. B. D., a female patient, aged thirty-one; married; duration of attack before admission, six weeks. Died of carbuncle, having been resident in the hospital four months. On admission, she was suffering from acute mania, with intermittent paroxysms of great violence. Before being brought to the hospital, her insanity had been evinced by great and unusual irritability of temper; violently refusing to take food, go to bed, dress or undress herself, remain in her room or in the house, unless forcible means were adopted to oblige her. For the first three months after admission there was but little change or improvement in her symptoms. She remained on alternate days obstinate, irritable, taciturn, and violent; was compelled to take her food with great difficulty, and required constant attention. On other days, her mental state appeared to undergo a perfect revolution. She rose in the morning cheerful, good-tempered, industrious, and, to a casual visitor, she was convalescent. During the fourth month her mental state steadily and permanently improved, but her physical strength sank with the exhaustion following carbuncles.

Autopsy.—Considerable general emaciation; the skull-cap heavy; partial milky white opacity of the arachnoid over the entire convexity of both cerebral hemispheres; slight infiltration of the pia mater; about three ounces of limpid fluid in the

lateral ventricles; the foramen of Monro converted into a large direct opening between the two cavities; the bloody points in section of the cerebral substance numerous and large; some ounces of dropsical fluid in the pericardium; concentric hypertrophy of the left ventricle of the heart, of which the muscular substance was firm, and the cavity small; the liver and kidneys healthy.

5. W. C., a male criminal lunatic, acquitted, on the ground of insanity, of the crime for which he was tried; thirty years of age; of a low, melancholy temperament, dissatisfied with everybody and everything. His occupation had been that of a sailor; his habits of life intemperate. He suffered much from disease of the spine, occasioned by a fall from the rigging of his ship; his head was not hurt at that time, nor was his mind observed to be diseased until many years after; his insanity was principally marked by moroseness and irritability; he was dangerous to others, frequently striking people without other provocation than a fancy that they intended to annoy him. On the evening of the day of his death, he was sitting engaged with one of his companions playing a game of chess, when he suddenly left the table for the closet, intimating his intention of returning immediately. A quarter of an hour elapsed without his doing so; and when search was made for him, he was found hanging by his braces to the lintel of the door;—the body was warm, but life quite extinct.

Autopsy.—The contents of the cranium healthy, except very slight and almost doubtful partial opacity of the arachnoid, and a few drachms of fluid in the lateral ventricles; the left lung adhering to the cavity universally, and so strongly that the substance was extremely lacerated in attempting to detach it; two or three partial adhesions on the right side. Behind the posterior mediastinum, and extending from the second to the tenth dorsal vertebræ, there was a collection of well-formed pus in the front of the spinal column; it was contained in a thick sac of irregular and sacculated surface, closely adherent to the sides of the column. The bodies of the vertebræ at the middle of this space were bare here and there to a small extent. This collection of matter corresponded to an angular curvature on the posterior aspect of the affected spinal region, ascribed by the patient to a fall from the rigging to the deck of a vessel. In the upper part of the abdomen, the viscera, apparently healthy, were closely adherent to each other and to the walls of the abdomen. The convex surface of the liver adhered throughout to the diaphragm, while its concavity was so closely connected to the stomach that careful dissection would have been required to separate them without injury. The stomach adhered to the abdominal walls and to the colon. The upper convolu-

tions of the small intestine were partially connected to the colon and mesocolon, as well as to each other, by thin and elongated adhesions. No other morbid appearance was observed in the abdomen.

6. S. C., a male patient, died of phthisis, having been under treatment in the hospital three months. This patient had been a publican by trade, and formerly was well to do in the world; but intemperate habits injured his business, and the consequent loss of property caused serious mental excitement. On admission he was excited, and, if restrained, violent to any one who came in his way. He fancied himself ill-used, and on that account threatened to cut his throat and make away with himself. His conversation was incoherent and rambling. Morphia was given in grain doses three times in the day, but without any beneficial effect, and after three weeks was discontinued. His paroxysms of excitement caused deep after-depression, and his bodily health rapidly sank, with cough, hectic, and all the symptoms of pulmonary disease.

Autopsy.—Examination made thirty hours after death. Body emaciated. The contents of the skull healthy; nothing remarkable in their appearance. In the right pleura there was about a pint of opaque milky fluid, and the lung itself was externally of the same colour, flattened, and much decreased in size. At the apex were two or three vomicae containing purulent fluid; and throughout the structure of the organ tubercles were thickly scattered; the structure itself was hepatized, and appeared to contain no air; there was considerable long-standing adhesion. The left lung was perfectly healthy. Liver large and healthy; gall-bladder very distended with bile. Kidneys smaller than natural: on the surface of the right one a small hard tubercle lying beneath the capsule, and a small cyst about the size of a mustard-seed in the same position on the left kidney. Intestines healthy.

7. H. G. H., a female patient, died from the exhaustion following acute mania; the mental disease had existed four days previous to her admission. When brought to the hospital, she was perfectly unconscious, and in a state of such extreme exhaustion, that it was necessary at once to place her in bed, and employ every measure to bring about reaction. From the report of her friends it appears she had taken little or no nourishment for some days previous to the commencement of the attack. She lingered on, just sufficiently conscious to swallow liquid nourishment if placed in her mouth, but ultimately sank on the fifth day after admission.

Autopsy.—The brain and its membranes healthy, the only circumstance observed within the head being a slightly increased

quantity of fluid in the base of the skull after the brain had been removed.

The heart appeared considerably larger than usual. This depended entirely upon great distension of the right cavities with blood. The right lung was healthy, as was also the upper lobe of the left. The posterior lobe of the left, at its posterior aspect, was in the congestive stage of pneumonia; on cutting through this part and squeezing it, a small quantity of thickish puriform fluid escaped at two or three points. The abdominal viscera were healthy.

(To be continued.)

HEREDITARY INFLUENCE, ANIMAL AND HUMAN.*

(From the "WESTMINSTER REVIEW.")

THE problem of hereditary transmission, physical and moral, although one of the most interesting of physiological problems, is also one of the most baffling. In spite of its obscurity, it fascinates the inquirer; perhaps with all the greater force because of its obscurity, for, as Spinoza truly says, men cease to admire that which they fancy they understand: *tum enim vulgus rem aliquam se satis intelligere existimat quum ipsam non admiratur*. The question of hereditary influence has descended from antiquity encumbered with prejudices and deceptive facts, which seemed coercive and conclusive, but were in truth only one-sided; and encumbered still more with hypotheses formed in ignorance of Nature's processes. It has reached us a problem still; every scientific mind not prepossessed by an hypothesis, nor content to disregard a mass of facts, must pronounce the answers hitherto proposed deficient in the primary requisite of comprehending all the phenomena. Nevertheless, answers abound. Every cattle-breeder, who rises to the height of a theory, has his theory on this complex matter, and acts upon it in the breeding of cattle and poultry. Every village gossip, every Mrs. Gamp, has her facts and her opinions, which, in expansive moments, she delivers with great confidence. Every physician has his theory, especially with reference to the transmission of disease. Even the man of letters is not without his generalization on the transmission of genius: "all men of genius," he tells you, "have had remarkable mothers;" in support of which generalization he counts off upon his fingers the illustrations which occur to him, perfectly heedless of the mass of cases in which the mothers have not been remarkable.

The various theories imply variety of interest in the question, and a practical need for the solution. A subject at once so interesting and important may well claim some attention from us here; and we shall endeavour to disengage it from all technical difficulties, so as to present it in a form intelligible to the general reader, and to clear up many misconceptions, popular and scientific, which at present obstruct the question. Dr. Lucas has in two bulky octavos gathered from far and wide a mass of material, good, bad, and indifferent, with laudable diligence, but with a want of discrimination not so laudable. He is erudite, but he has *les défauts de sa qualité*. His erudition is utterly uncritical;

* In deference to the complimentary wishes expressed by the writer of this able article, it is the intention of the Editor of the Psychological Journal to consider at length, in a future number, the important subject of hereditary influences.

and yet it is obvious that the sole value of the cases collected depends on their authenticity. It is the common error of erudite men to imagine that quantity supplies the place of quality. They fancy themselves rich when their purses are filled with forged notes; and so long as these notes are kept from presentation at the Bank, their delusion is untroubled. Dr. Lucas has far too many of these notes in his purse: the reader must take up his volumes with great caution. Mr. Orton makes no such erudite display; but he has collected some curious facts, both from his own experience and from the experience of other breeders. M. Girou is one of the authorities most frequently referred to by writers on this topic. To vast practical experience in cattle-breeding he adds very considerable physiological knowledge and force of intellect.

Heritage (*Phéridité*), or the transmission of physical and mental qualities from parents to offspring, is one of those general facts of Nature which lie patent to universal observation. Children resemble their parents. Were this law not constant, there could be no constancy of Species: the horse might engender an elephant, the squirrel might be the progeny of a lioness, the tadpole of a tapir. The law, however, is constant. During thousands of years the offspring has continued to exhibit the structure, the instincts, and all the characteristics of the parents. Every day some one exclaims—as if the fact surprised him—“That boy is the very image of his father!” yet no one exclaims, “How like that pug dog is to its parent!” Boys or pug dogs, all children resemble their parents. We do not allude to the fact out of any abstract predilection for truisms, but simply to marshal into due prominence an important truth, on which the whole discussion of heritage must rest. The truth is this: Constancy in the transmission of structure and character from parent to offspring, is a law of Nature.

That this truth is not a truism we shall show by at once contradicting, or at least qualifying it. The very same experience which guarantees the constancy, also teaches, and with almost equal emphasis, that this constancy is not absolute. Variations occur. Children sometimes do *not* resemble their parents; which accounts for the exclamations of surprise when they do resemble them. Nay, the children are sometimes not only unlike their parents, they are, in important characteristics, unlike their Species. We then call them Deformities or Monsters, because, while their Species is distinguished by having four legs, they themselves have six or none; while their Species possesses a complex brain, they are brainless, or have imperfect brains; while their Species is known by its cloven hoofs, they have solid hoofs, and so on.* Dissemblances as great are observable in moral characteristics. We see animals of ordinary aptitudes engender offspring sometimes remarkable for their fine qualities, and sometimes for their imbecility. The savage wolf brings forth occasionally a docile, amiable cub; the man of genius owns a blockhead for his son. In the same family we observe striking differences in stature, aspect, and disposition. Brothers brought up together in the same nursery, and under the same tutor, will differ as much from each other as they differ from the first person they meet. From Cain and Abel down to the brothers Buonaparte, the striking opposition of characters in families has been a theme for rhetoric. Nor is this all. In cases where the consanguinity may be said to be so much nearer than that of ordinary brotherhood, namely, in twins, we see the same diversity; and this diversity is exhibited in those rare cases where the twins have *only one body between them*. The celebrated twins Rita and Christina† were so *fused* together, that they had

* Flachslund rapporte que deux époux bien constitués mirent au monde trois enfans sans avant-bras ni jambes; d'autres dont parle Schmucker n'eurent que des enfans munis de douze orteils et douze doigts.”—Burdach, *Traité de Physiologie*, ii. 264.

† See Geoffroy St. Hilaire, *Philosophie Anatomique*, vol. ii.; and Serres, *Recherches d'Anatomie Transcendante*.

only two legs between them: two legs and four arms and two heads; yet they were quite different in disposition. The same difference was manifested in the celebrated Presburg twins, and in the African twins recently exhibited in London.

It is clear, then, that offspring do not always closely resemble parents; and it is further clear, from the diversities in families, that they do not resemble them in equal degrees. Two brothers may be very unlike each other, and yet both like their parents; but the resemblance to the parents must, in this case, be variable. So that when we lay down the rule of *constancy in transmission*, we must put a rider on it, to the effect that this Constancy is not absolute, but is accompanied by a law of Variation. It is the intervention of this law which makes hereditary influence a problem; without it, heritage would be as absolute as the union of acids with bases.

Some philosophers have tried to explain the law of constancy in transmission, and its independence of the law of variation, by maintaining that it is the Species only, not the Individual, which is reproduced. Thus a sheep is always and everywhere a sheep, a man a man, reproducing the *specific type*, but not necessarily reproducing any individual peculiarities. All sheep resemble each other, and all men resemble each other, because they all belong to specific types. What does the reader say to this hypothesis? Burdach, who adopts it,* adduces his facts: for example, a dog from whom the spleen was extirpated reproduced dogs with perfect spleens; an otter, deprived of its fore paws, produced six young with their legs quite perfect; in a word, "*l'idée de l'espèce se reproduit dans le fruit et lui donne des organes qui manquaient au père ou à la mère.*" The hypothesis has seemed convincing to the majority of thinkers, but it labours under one fatal objection—namely, Species cannot reproduce itself, for Species does not exist. It is an entity, an abstract idea, not a concrete fact. It is a fiction of the understanding, not an object existing in Nature. The *thing* Species no more exists than the thing Goodness or the thing Whiteness. Nature only knows individuals. A collection of individuals so closely resembling each other as all sheep resemble each other, are conveniently classed under one general term, named Species; but this general term has no objective existence; the abstract or typical sheep, apart from all concrete individuals, has no existence out of our systems. Whenever an individual sheep is born, it is the offspring of two individual sheep, whose structures and dispositions it reproduces; it is not the offspring of an abstract idea; it does not come into being at the bidding of a Type, which as a Species sits apart, regulating ovine phenomena. The facts of dissemblance between offspring and parents we shall explain by-and-by; they do not plead in favour of Species, because Species is a figment of philosophy, not a fact. The sooner we disengage our Zoology from all such lingering remains of old Metaphysics the better. Nothing but dreary confusion and word-splitting can come of our admitting them. Think of the hot and unwise controversies respecting "transmutation of species," which would have been spared if a clear conception of the meaning of Species had been steadily held before the disputants, or if the laws which regulate heritage had been duly considered. In one sense, transmutation of Species is a contradiction in terms. To ask if one species can produce another—*i.e.*, a cat produce a monkey—is to ask if the offspring do not inherit the organization of their parents. We know they do. We cannot conceive it otherwise. But the laws of heritage place the dispute in something of a clearer light, for they teach us that "Species" is constant, because individuals reproduce individuals closely resembling them, which is the meaning of "Species," and they also teach us, that individuals reproduce individuals *varying* in structure from themselves, which Varieties, becoming transmitted as part and parcel of the parental influence, will, in time, become so great as to constitute a difference

* Physiologie, ii. 245.

in Species. It is in vain that the upholders of "fixity of Species" assert, that all the varieties observed are differences of *degree* only. Differences of degree become differences of kind, when the gap is widened: ice and steam are only differences of degree; but they are equivalent to differences of kind. If, therefore, "transmutation of Species" is absurd, "fixity of Species" is not a whit less so. That which does not exist, can neither be transmuted nor maintained in fixity. Only individuals exist; they resemble their parents, and they differ from their parents. Out of these resemblances we create Species, out of these differences we create Varieties; we do so as conveniences of classification, and then believe in the reality of our own figments.

"Les espèces," said Buffon, boldly, "sont les seuls êtres de la nature," and thousands have firmly believed this absurdity. The very latest work published on this subject,* reproduces the dictum, and elaborately endeavours to demonstrate it. "Les espèces sont les formes primitives de la nature. Les individus n'en sont que des représentations, des copies." This was very well for Plato; but for a biologist of the nineteenth century to hold such language shows a want of philosophic culture. A cursory survey of the facts should have shown the error of the conception, if nothing else would. Facts plainly tell us that the individual and the individual's peculiarities, not those of the abstract Type, are transmitted. Plutarch speaks of a family in Thebes, every member of which was born with the mark of a spear-head on his body; and although Plutarch is not a good authority for such a fact, we may accept this because it belongs to a class of well-authenticated cases. An Italian family had the same sort of mark, and hence bore the name of *Lansada*. Haller cites the case of the Bentivoglie family, in whom a slight external tumour was transmitted from father to son, which always swelled when the atmosphere was moist. Again, the Roman families *Nasones*, and *Buccones*, indicate analogous peculiarities; to which may be added the well-known "Austrian lip" and "Bourbon nose." All the Barons de Vessins were said to have a peculiar mark between their shoulders; and by means of such a mark, La Tour Landry discovered the posthumous legitimate son of the Baron de Vessins in a London shoemaker's apprentice. Such cases might be received with an incredulous smile if they did not belong to a series of indisputable facts noticed in the breeding of animals. Every breeder knows that the colours of the parents are inherited, that the spots are repeated, such as the patch over the bull-terrier's eye, and the white legs of a horse or cow; and Chambon* lays it down, as a principle derived from experience, that by choosing the parents you can produce *any* spots you please. Girou noticed that his Swiss cow, white, spotted with red, gave five calves, four of which repeated exactly the spots of their mother, the fifth, a cow-calf, resembling the bull. And do we not all know how successful our cattle breeders have been in directing the fat to those parts of the organism where gourmandise desires it? Have not sheep become moving cylinders of fat and wool, merely because fat and wool were needed?

Still more striking are the facts of *accidents* becoming hereditary. A superb stallion, son of *Le Glorieux*, who came from the Pompadour stables, became blind from disease: all his children became blind before they were three years old. Burdach cites the case of a woman who nearly died from hæmorrhage after blood-letting; her daughter was so sensitive, that a violent hæmorrhage would follow even a trifling scratch; she, in turn, transmitted this peculiarity to her son. Horses marked during successive generations with red-hot iron in the same place, transmit the visible traces of such marks to their colts. A dog had her hinder parts paralysed for several days by a blow; six of her seven

* Cours de Physiologie Comparée, par M. Flourens, 1856. A feeble and inaccurate book.

† Traité de l'Education des Moutons, i. 116.

pups were deformed or excessively weak in their hinder parts, and were drowned as useless.* Treviranus† cites Blumenbach's case of a man whose little finger was crushed and twisted, by an accident to his right hand : his sons inherited right hands with the little finger distorted. These cases are the more surprising, because our daily experience also tells us that accidental defects are *not* transmitted ; for many years it has been the custom to cut the ears and tails of terriers, and yet terrier pups do not inherit the pointed ears and short tails of their parents ; for centuries men have lost arms and legs, without affecting the limbs of our species. Although, therefore, the deformities and defects of the parent may be inherited, in general they are not. For our present argument it is enough that they are so *sometimes*.

Idiosyncrasies assuredly belong to the individual, not to the species ; otherwise they would not be idiosyncrasies. Parents with an unconquerable aversion to animal food, have transmitted that aversion ; and parents, with the horrible propensity for human flesh, have transmitted the propensity to children brought up away from them under all social restraints. Zimmermann cites the case of a whole family upon whom coffee acted like opium, while opium had no sensible effect whatever on them ; and Dr. Lucas knows a family upon whom the slightest dose of calomel produces violent nervous tremblings. Every physician knows how both predisposition to and absolute protection against certain specific diseases are transmitted. In many families the teeth and hair fall out before the ordinary time, no matter what hygiene be followed. Sir Henry Holland remarks, "the frequency of blindness as an hereditary affection is well known, whether occurring from cataract or other diseases of the parts concerned in vision. The most remarkable of the many examples known to me, is that of a family where four out of five children, otherwise healthy, became totally blind from amaurosis about the age of twelve ; the vision having been gradually impaired up to this time. What adds to the singularity of this case is the existence of some family monument long prior in date, where a female ancestor is represented with several children around her, the inscription recording that all the number were blind."‡ But not only are structural peculiarities transmitted, we see even queer tricks of manner descending to the children. The writer had a puppy, taken from its mother at six weeks old, who although never taught "to beg" (an accomplishment his mother had been taught), spontaneously took to begging for everything he wanted, when about seven or eight months old : he would beg for food, beg to be let out of the room, and one day was found opposite a rabbit-hutch begging for the rabbits. Unless we are to suppose all these cases simple coincidences, we must admit individual heritage ; but the doctrine of probabilities will not permit us to suppose them coincident. Let us take the idiosyncrasy of cannibalism, which may be safely said not to appear more than once in ten thousand human beings ; if, therefore, we take one in ten thousand as a ratio, the chances against any man manifesting the propensity will be ten thousand to one, but the chances against his son also manifesting it will be—what some more learned calculator must declare.

Not the Species, but the Individual, then, we are forced to admit, presides over heritage ; and this will help to explain many puzzling phenomena. Thus M. Danney made experiments during ten years with rabbits, a hundred couples being selected by him with a view to the creation of peculiarities. By always choosing the parents "d'après des circonstances individuelles fixes et toujours les mêmes dans certaines lignées," he succeeded in obtaining a number of malformations according to his preconceived plan. And such experiments have been repeated on dogs, pigeons, and poultry with like success. It is on this fact of individual heritage that longevity depends. There is no term of life for

* Girou, p. 127.

† Biologie, iii. 452.

‡ Medical Notes and Reflections, p. 23.

the "species," only a term for the individual; a fact which sets all the speculations of Cornaro, Hufeland, and Flourens at naught. There are limits which neither the "species" nor the individual can be said to pass; no man has been known to live two hundred years; but the number of years which each individual will reach, without accident, is a term depending neither on the "species," nor on his own mode of life, but on the organization inherited from his parents. Temperance, sobriety, and chastity, however desirable, both in themselves and in their effects, will not ensure long life; intemperance, hardship, and irregularity will not prevent a man living for a century and a half. The facts are there to prove both propositions. Longevity is an inheritance. Like talent, it may be cultivated; like talent, it may be perverted; but it exists independent of all cultivation, and no cultivation will create it. Some men have a talent for long life.

M. Charles Lejonecourt published, in 1842, his *Galerie des Centenaires*, in which may be read a curious list of examples proving the hereditary nature of longevity. In one page we have a day-labourer dying at the age of 108, his father lived to 104, his grandfather to 108, and his daughter then living had reached 80. In another we have a saddler whose grandfather died at 112, his father at 113, and he himself at 115; this man, aged 113, was asked by Louis XIV. what he had done to so prolong life; his answer was—"Sire, since I was fifty I have acted upon two principles; I have shut my heart and opened my wine-cellar." M. Lejonecourt also mentions a woman then living aged 150, whose father died at 124, and whose uncle at 113. But the most surprising of the cases cited by Lucas is that of Jean Golembiewski, a Pole, who in 1846 was still living, aged 102, having been eighty years as common soldier, in thirty-five campaigns under Napoleon, and having even survived the terrible Russian campaign, in spite of five wounds, and a soldier's recklessness of life. His father died aged 121, and his grandfather 130. Indeed, the practice of every annuity and insurance office suffices to convince us of ordinary experience having discovered that length of life is somehow dependent on hereditary influence.

Although instincts, in the general acceptation of the term, may be said to belong to the species and to be transmitted with their specific type, we have abundant evidence of the individual transmission of what are called instinctive peculiarities, or acquired habits. Thus Girou relates the case of a sporting dog, taken young from its mother and father, who was singularly obstinate, and exhibited the greatest terror at every explosion of the gun, which always excites the ardour of the species. On the owner expressing his surprise to the gentleman from whom he received the dog, he was told that nothing was more likely, for the dog's father had the same peculiarity. How the vicious disposition of horses is transmitted all breeders know. Again, we know that the vice of drunkenness is very apt to be inherited; and that the passion for gambling is little less so. "A lady with whom I was very intimate," relates Da Gama Machado, "and who possessed great wealth, passed her nights in gaming; she died young, from pulmonary disease. Her eldest son was equally addicted to play, and he also died of consumption at the same age as his mother. His daughter inherited the same passion and the same disease."* Other and more crapulous vices are inherited, and are exhibited in cases where the early death of the parents, or the removal of the children in infancy, prevents the idea of any imitation or effect of education being the cause. That the "thieving propensity" is transmitted from father to son, through generations, all acquainted with police-courts know. Gall† has cited some striking examples; and that murder, like talent, runs in families, is too notorious to need illustrations here. Dogs taught to "point" or "set" transmit the talent.

* *Théorie des Ressemblances*, p. 154, quoted by Lucas.

† *Fonctions du Cerveau*, i. 207.

The American dogs inherit the peculiar cunning necessary to hunt the peccari without danger. F. Cuvier has observed that young foxes, in those parts of the country where traps are set, manifest much more prudence than even the old foxes in districts where they are less persecuted. Again, birds born in a country inhabited by man inherit their alarm at his presence; but travellers narrate that the same species encountered on uninhabited islands manifested no alarm, and are knocked down as easily as a gentleman in Fleet-street; they soon, however, learn to dread man, and this dread they transmit. As these last illustrations may be relegated to the vague region of instincts, we will confine ourselves to more individual and accidental characteristics. Thus Girou relates how a man known to him had the habit of sleeping on his back, with his right leg crossed over the left; one of his daughters showed the same peculiarity from her birth, and constantly assumed it in her cradle, in spite of her swathings. Venette knew a woman who limped with the right leg; her daughter was born with the same defect in her right leg. Ambrose Paré noticed that several children who had a peculiar mode of shaking the head, inherited it from their parents.

The inevitable conclusion from all these facts is, that parents transmit their individual peculiarities of colour, form, longevity, idiosyncrasy, &c., to their offspring, and that they do this *not as reproducing the species*, but as reproducing *their own individual organizations*. But now comes the difficult part of our inquiry:—Which is the predominating influence, that of the male, or that of the female? If both parents join to form the child, does one parent give one group of organs, and another parent another group; or do both give all?

“Half is his, and half is thine: it will be worthy of the two!”

sings the poet; and the physiologist asks,—*Which half?*

Speaking of mules, Vieq-d’Azyr says, with proper caution, that “it seems as if the exterior and the extremities were modified by the father, and that the viscera emanate from the mother.” The reserve with which the great anatomist expresses himself has not been imitated by his successors; indeed, men are generally averse to uncertainties—they like a decisive opinion, a distinct formula. Hence we have the very popular formula adopted by Mr. Orton in his “Lectures”—“That the male gives the external configuration, or in other words, the locomotive organs; while the female gives the internal, or in other words, the vital organs;” which is generally stated with more scientific precision thus—“the male gives the animal system, the female the organic or vegetative.” Very great and authoritative names may be cited in support of this view; and as all such formulas are the expressions of numerous facts, we must expect to find their advocates powerful in facts to support them. If there are facts which are equally explicit and diametrically opposed to those used as evidence for the theory, it is clear that the theory expresses only part of the truth. Let us see how the case stands.

Linnaeus says that the *internal* plant (*i. e.*, the organs of fructification) in all hybrids is like the female; the *external* (organs of vegetation), on the contrary, resembles the male. This is, however, diametrically opposed by De Candolle, who announces it as a general law that the organs of vegetation are given by the female, those of fructification by the male.* When two doctors of such importance differ on a point like this, we may suspect that both are right and both are wrong; and here our suspicion is supported by the mass of facts adduced by the experiments of M. Sagaret,† which refute the hypothesis of Linnaeus and the hypothesis of De Candolle. What we have just indicated with regard to plants, has been the course pursued with regard to animals: one class of observations has seemed to prove that the father bestows the “animal system;”

* Physiologie Végétale, p. 716.

† Pomologie Physiologique, p. 555, sq.

another class of observations has seemed to prove that the mother bestows it; and a third class has proved both theories inadequate. Quite recently General Daumas published the result of his long experience with Arab horses,* arguing that, according to the testimony of the Arabs, the stallion was the most valuable for the purposes of breeding. Upon this, the *Inspecteur des Haras*, who had traversed Asia for the express purpose of collecting evidence on the subject, published his diametrically opposite conclusion, declaring that it was the mare whose influence preponderated in the foal. General Daumas replied, and cited a letter addressed to him by Abd-el-Kader, who may certainly be said to understand Arab horses better than Europeans. The letter is worth reading for its own sake; we can, however, only quote its testimony on the particular point now under discussion. "The experience of centuries has established," he says, "that the essential parts of the organization, such as the bones, the tendons, the nerves, and the veins, are always derived from the stallion. The mare may give the colour and some resemblance to her structure, but the principal qualities are due to the stallion." This is very weighty testimony, on which we will only for the present remark, that it merely asserts the *preponderance* of the male influence as respects the locomotive system; it does not assert that absolute independence of any female influence maintained in the formula of Prevost and Daumas, Lallemand and others, which we are now combating. Abd-el-Kader's statement is tantamount to that made by Mr. Orton,—

"I do not mean it to be inferred that either parent gives either set of organs uninfluenced by the other parent; but merely that the leading characteristics and qualities of both sets of qualities are due to the male on the one side, and to the female on the other, the opposite parent modifying them only."

This is a much more acceptable theory than the other, but it is only an approximation to the truth. Mr. Orton's first illustration is the hybrid of the horse and ass.

"It is known that the produce of the male ass and the mare is a mule; but I do not think it is equally well-known that the produce of the stallion and the female ass is what has been denominated a hinny—yet such is the case. . . . The mule, the produce of the ass and mare, is essentially a modified ass—the ears are those of an ass somewhat shortened—the mane is that of an ass—the tail is that of an ass—the skin and colour are those of an ass somewhat modified—the legs are slender, the hoofs high, narrow, and contracted, like those of an ass. The body and barrel are round and full, in which it differs from the ass and resembles the mare.

This description is accurate, but—we put it interrogatively—is it *always* the description of a mule, and *never* that of a hinny? This latter, the produce of the stallion and the female ass, "is essentially a modified horse—the ears like those of a horse somewhat lengthened—the mane flowing—the tail bushy like that of a horse—the skin is fine like that of a horse—the legs are stronger, and the hoofs broad and expanded like those of a horse. The body and barrel are flat and narrow, in which it differs from the horse, and resembles its mother the ass." From these facts, Mr. Orton deduces the conclusion, that the offspring of a cross is not simply a mixture of the two parents, nor is it an animal that has accidentally a similitude to one or other of its parents, inasmuch as we can produce at will either the hinny or the mule. The reader will presently see why such a conclusion cannot be accepted; and we may at once anticipate what will hereafter be more fully explained, by saying that the differences Mr. Orton signalizes are easily interpreted by another theory. In point of fact, both mule and hinny are modified asses: in each the structure and disposition of the ass predomi-

* Les Chevaux de Sahara; see also an article in the *Revue des Deux Mondes*, May, 1855, on Le Cheval de Guerre.

nates; and it does so in virtue of that greater "potency of race" which belongs to the ass—a potency which is less effective on the hinny, because the superior vigour of the stallion modifies it, according to ascertained laws.

"I would call your consideration," Mr. Orton continues, "to a very curious circumstance pertaining to the voice of the mule and the hinny; to which my attention was called by Mr. Lort. The mule *brays*, the hinny *neighs*. The why and wherefore of this is a perfect mystery, until we come to apply the knowledge afforded us by the law I have given. The male gives the locomotive organs, and the muscles are amongst these; the muscles are the organs which modulate the voice of the animal; the mule has the muscular structure of its sire the ass, and brays; the hinny has the muscular structure of its sire the horse, and neighs."

This seems decisive, until we extend our observations, and then we find the law altogether at fault. Thus the produce of a bull and a mare neither *lowed* nor *neighed*, but uttered a shrill cry somewhat like that of the goat. The produce of a dog and a she-wolf sometimes bark and sometimes howl, according to Buffon; and the produce of a bitch-fox and a dog, according to Burdach, barked like a dog, though somewhat hoarsely, and howled like a wolf when it was hurt. A similar remark has been made by all who have attended to cross-breeding in birds; the hybrid of the goldfinch and the canary has the song of the goldfinch mingled with occasional notes of the canary, which seem perpetually about to gain the predominance. Finally, we know how, in the human family, a magnificent voice is inherited from a mother as often as from a father.

These illustrations, apart from their interest, teach us to be cautious in generalizing from a few facts, however striking, in questions so complex as all biological questions are. Let us, however, continue to call on Mr. Orton for facts. He quotes a letter from Dr. George Wilson (whose opinion on any subject will be worth hearing) to Dr. Harvey, respecting the produce of the Manx cat and the common cat. The Manx cat has no tail, and is particularly long in the hinder legs. "You will see," says Dr. Wilson, "from the facts communicated, that where the Manx cat was the mother, the kittens had tails of a sort; where the Manx cat was the father, three-fourths of the kittens had no tail." Mr. Orton also quotes a communication made to him by Mr. Garnett of Clitheroe:—

"From these I select those pertaining to the Muscovy duck and some hybrids produced between it and the common duck. You are aware that the Muscovy drake exceeds in a striking degree the duck in size; the drake weighing from 8 to 9½ lbs., while the duck weighs only from 3 to 4 lbs. Hybrids produced from the Muscovy drake and common duck followed this peculiarity of the male parent as to the relative size of the male and female hybrids; the male weighing from 5 to 6 lbs., the females not half as much. On the other hand, the difference in the size of the sexes when the hybrids were the produce of the common drake and the Muscovy duck, was not apparent."

A valuable observation, certainly. Mr. Orton adds the following of his own. He placed a Cochin cock with his common hens:—

"Reasoning that if the vital organs were due to the female, then the cross between these birds (being externally Cochins and internally common hens) should lay white eggs, the secretion of the egg being a vital function. You know that the Cochin lays a chocolate-coloured egg. The half-bred did what theory said they should do—laid white eggs; and not only white eggs, but eggs also which, on the evidence of myself and family, were very inferior in taste, having lost the mellow, buttery taste of the Cochin egg."

But he has recorded another curious fact respecting this same experiment, which might have made him aware of the problematical nature of his theory, had not his sagacity been hoodwinked by the theory:—

"These same half-bred birds afforded another and a very unlooked-for illustration of the position we have taken. They were all, when first hatched, like the Cochin cock, profusely feathered on the legs and feet, so much so, that they had to be marked to distinguish them from the pure bred birds. We see here that, according to the law, the male parent implanted its characteristics; but what was curious, in a few weeks, in some of the half-breeds all, and in many most, of the leg feathers were shed. Two out of some twenty birds only retained them in any very conspicuous degree. Now, why was this? The cock had implanted his external characteristics, the hen had given her vital organs. The feathers of the male were there; but the vital organs necessary to their growth were not there; and consequently, after a time, for want of nutriment, these feathers were shed."

We will not here enter on the question of the growth of feathers (a very complex matter), but, accepting his own premises, ask him, if the external characteristics are thus dependent on the vital organs for their growth and development, and these vital organs are given by the female, how does the child ever exhibit the characteristics of the male, after infancy? Of what use is it for the male to implant his characteristics, when the female influence is thus certain to annihilate them?

Mr. Orton further cites the practice of Bakewell with respect to his celebrated Dishley sheep. His rams might be bought or hired for a good price; but his best ewes were sacred. These he would neither sell nor let.

As a counter-statement, let it be noted that, according to Girou, the farmers are more particular about the bull than about the cow when they want a good milking cow, for it is observed that the property of abundant secretion of milk is more certain to be transmitted from a bull than from a cow. We question the fact of a bull having greater influence than the cow, believing that in each case the property is transmitted according to direct heritage; but that the bull should be known to have any importance in this respect, is an evidence that the "vital organs" are not solely given by the female.

The result of Mr. Orton's researches proves that the male *does* transmit his qualities to his descendants; as a matter of fact this must be always distinctly remembered; but neither his researches nor those of his predecessors suffice to prove this transmission to be *absolute*, in the sense required by those who maintain that the male gives the *animal* and the female the *vegetative* organs; as well as by those who maintain that the male influence necessarily and invariably predominates in the animal, the female in the vegetative organs. Still it is important to know that by the pollen of flowers we can modify the tints, and produce any varieties of tulip, violet, or dahlia; important to know that we can also modify the plumage of birds, and the colour of animals: it is important to know that the male qualities *are* transmissible. But for scientific rigour this is not enough. Before we can establish a law of this kind, we must be sure that the fact is constant and admits of no exceptions, or only of such apparent exceptions as may be classed under unexplained perturbations. Now daily observations, no less than recorded cases, assure us that the law is very far from being constant, that the female as unmistakeably transmits her qualities as the male transmits his, and that any theorist who should reverse the current theory and declare the mother bestowed the animal system, leaving the vegetative to the father, would be able to make a formidable array of facts. Let us glance awhile at the evidence.

It is said the male gives the colour, but the female does so likewise. A black cat and a white cat will have kittens which may be all black, all white, or black spotted with white, and white spotted with black. Every street will furnish examples. Isidore Geoffroy St. Hilaire speaks of a case under his observation, of a black buck and a white doe; the first produce was a black and white fawn; the second a fawn entirely black, except a white spot above the hoof.* Burdach mentions the case of a raven and a grey crow, who had a

* Dict. Classique d'Histoire Naturelle, x. 121.

brood of five: two black like the father; two grey like the mother; and one mixed. The same result is observed with respect to all other qualities. But perhaps the most decisive examples we could quote of the twofold influence of parents is in the singular instance recorded by Buffon. The Marquis Spontin Beaufort had a she-wolf living in his stables with a setter dog, by whom she had two cubs, a male and a female. The male resembled externally his father the dog, except that his ears were pointed and his tail like that of the wolf; the female, on the contrary, resembled her mother, the wolf, in all external characteristics *except* the tail, which was the same as her father's. Here in one case, the father gave the external characteristics, in the other the mother, while the tail was in each case, as it were, transposed. But the marvel of this case does not stop here: the cubs manifested a striking difference in disposition, in each case *resembling in character*, the parent it did *not resemble in appearance* and in sex; thus the male cub, which had all the appearance of a dog, was fierce and untameable as the wolf; the female cub, which had all the appearance of a wolf, was familiar, gentle, and caressing even to importunity. Lucas records an analogous case. These hybrids are very instructive, because the wide differences in the aspect and nature of the parents enable us to separate, as it were, the influence of each. The wolf and the dog often breed together; and the following observations, interesting in themselves, will suffice to show the reader how much caution is necessary before drawing absolute conclusions from single illustrations. Valmont Bomare observed in the various hybrids of wolf and dog which came under his notice at Chantilly, a striking preponderance of the wolf over the dog; Marsch, on the contrary, observed in his experience a preponderance of the dog over the wolf; Geoffroy St. Hilaire and Pallas found the wolf to predominate; whereas, Marolle found the cubs remarkable for their gentleness and dog-like instincts, only recalling the wolf in their voracity and fondness for flesh. Girou found the preponderance to vary; sometimes the father, sometimes the mother re-appeared in the offspring. If there were no other evidence, this would suffice to disprove the hypothesis of either parent contributing one group of organs, to the absolute exclusion of the other parent.

The same fact of twofold influence is shown in the transmission of deformities, such as extra toes, extra fingers, &c.: sometimes the male, and sometimes the female is shown to preponderate, by the offspring inheriting the deformity of the male or the female. It is well said by Girou,* that "if the organization of the male was the only one which passed to the child, the child would resemble the father, as the fruit of a graft resembles the tree from which the graft was taken, and not at all the tree on which it was grafted." And what is here said of the whole organization, applies with equal force to any one system, such as the nervous or the nutritive.

Moreover, if the hypothesis we are combating be admitted—if the father bestows the nervous system—how are we to explain the notorious inferiority of the children of great men? There is considerable exaggeration afloat on this matter, and able men have been called nullities, because they have not manifested the great talents of their fathers; but allowing for all overstatement, the palpable fact of the inferiority of the sons to their fathers is beyond dispute, and has helped to foster the idea of all great men owing their genius to their mothers, an idea which will not bear confrontation with the facts. Many men of genius have had remarkable mothers; and that one such instance could be cited is sufficient to prove the error both of the hypothesis which refers the nervous system to paternal influence, and of the hypothesis which only refers the preponderance to the paternal influence. If the male preponderates, how is it that Pericles, who "carried the weapons of Zeus upon his tongue," produced nothing better than a Paralus and a Xanthippus? How came the infamous Lysimachus from the austere Aristides? How was the weighty intellect of

* De la Génération, p. 113.

Thucydides left to be represented by an idiotic Milesias, and a stupid Stephanus? Where was the great soul of Oliver Cromwell in his son Richard? Who were the inheritors of Henry IV. and Peter the great? What were Shakspeare's children, and Milton's daughters? Unless the mother preponderated in these and similar instances, we are without an explanation; for it being proved as a law of heritage, that the individual does transmit his qualities to his offspring, it is only on the supposition of *both* individuals transmitting their organizations, and the one modifying the other, that such anomalies are conceivable. When the paternal influence is not counteracted, we see it transmitted. Hence the common remark: "talent runs in families." The proverbial phrases, "l'esprit des Mortemarts," and the "wit of the Sheridans," imply this transmission from father to son. Bernardo Tasso was a considerable poet, and his son Torquato inherited his faculties heightened by the influence of the mother. The two Herschels, the two Colmans, the Kemble family, and the Coleridges, will at once occur to the reader; but the most striking example known to us is that of the family which boasted Jean Sebastian Bach as the culminating illustration of a musical genius, which, more or less, was distributed over three hundred Bachs, the children, of course, of very various mothers.

Here a sceptical reader may be tempted to ask, how a man of genius is ever produced, if the child is always the repetition of his parents? How can two parents of ordinary capacity produce a child of extraordinary power? The answer must be postponed until we come to treat of secondary influences. For the present, we content ourselves with insisting on the conclusion to which the foregoing survey of facts has led, namely, that *both* parents are *always* represented in the offspring; and although the male influence is sometimes seen to preponderate in one direction, and the female influence in another, yet this direction is by no means constant, is often reversed, and admits of no absolute reduction to a known formula. We cannot say absolutely, "the male gives such organs;" we cannot even say, "the male always preponderates in such or such a direction." Both give all organs; sometimes one preponderates, sometimes the other. In one family we see children resembling the father, children resembling the mother, and children resembling both.

This is the conclusion inevitable on a wide survey of the facts. It is equally inevitable *à priori*, if we take our stand upon the evidence of embryology; and as some readers prefer logical deductions to any massive accumulation of facts, we will ask them to consider the question from this point of view. Reproduction, in the vegetable and animal kingdoms, is known to naturalists under three forms. In the first, a single cell spontaneously divides itself into two cells. Here it is quite clear that the child reproduces the totality of the parent. In the second form, the process called "budding" takes place: the child here grows out of the substance of the parent, until its development is completed, and then it separates from the parent to live a free life. Here also the parent is reproduced in its totality. In the third form, a higher complexity of organization has led to a more complex and more special mode of reproduction: the parent gives off from its own substance, by what may be also considered a "budding process," a mass of cells, which as pollen and ovule, as sperm-cells and germ-cells, unite to develop into plants or animals. Here again, there ought to be no doubt that the parents are reproduced; their offspring truly may be called "their own flesh and blood." Nor would the doubt have ever arisen, had not the great complexity of the organisms admitted the intervention of the Law of Variations, to which all dissemblances are due. But however such interventions may baffle our inquiries, the mind recognises at once the truth of the proposition that sperm-cell and germ-cell are as much to be regarded in the light of reproductions of the parents, as the cells produced by spontaneous division are to be regarded in the light of repetitions of the parent-cell.

And here we may glance at an ingenious hypothesis which would explain the fact of all our organs being double, by the concurrence of both parents; so that the father would give one half, the mother the other half, the father the right, the mother the left side.* “Cette idée ferait présumer que notre corps est double, et que nous sommes composés de deux corps finis artistement adossés l’un à l’autre.” The fact that all our organs are double—some primitively, others permanently—was first demonstrated by Serres, who, in his very remarkable work on transcendental anatomy,† has given a rapid outline of this *Lex Serriana*, as Meckel calls it. In consequence of this primitive duality of all organs (the single organs being those in the median line, and formed by the fusion of two originally distinct organs), “l’embryon résulte de la réunion de deux moitiés d’embryon; l’animal unique, si l’on peut s’exprimer ainsi, est le produit de deux moitiés d’animaux.” Serres would not, however, give any countenance, we imagine, to the hypothesis of each half being furnished by each parent; for the hypothesis is contradicted by the facts of the perfect resemblance as well as perfect symmetry of each side, whereas if one parent only gave one side, we should see realized in life the fantastic combinations sometimes seen at masquerades, presenting us with a figure, half of which wears the dress of a man, and half of a woman; or half of an Italian bandit, and the other half of a good, peaceful shopkeeper.

It is now time that we should direct our attention to some of the perturbing causes, which mask the laws of transmission from our perfect apprehension. While proclaiming as absolute the law of individual transmission, while proclaiming that the parents are always reproduced in the offspring, we are met by the obvious fact of the offspring often exhibiting so marked a departure from their parents, being so different in form and disposition, that the law seems at fault. For instance, Gall speaks of a brood of wolf-cubs taken from their mother and brought up together; one was as gentle as a dog, the others retained the savageness of their species. We may also point to the fact of a man of genius suddenly starting up in an ordinary family; or to a thousand illustrative examples in which the law of individual transmission seems at fault. To explain these would be to have mastered the whole mystery of heritage; all that we can do is to mention some of the known perturbing influences.

Sir Everard Home mentions a striking case, which has become celebrated, of a thorough-bred English mare, who, in the year 1816, had a mule by a quagga—the mule bearing the unmistakable quagga marks. In the years 1817, 1818, and 1823, this mare again foaled, and although she had not seen the quagga since 1816, her three foals were all marked with the curious quagga marks. Nor is this by any means an isolated case. Meckel observed similar results in the crossing of a wild boar with a domestic sow; in the first litter several had the brown bristles of the father; and in each of the sow’s subsequent litters by domestic boars, some of the young ones were easily distinguished by their resemblance to the wild boar. Mr. Orton verified this fact in the cases of dogs, pigs, and poultry. Of the latter he says: “The so-called silk fowls have certain marked peculiarities—a silky, or downy plumage, a black skin and face, black bill and mouth, black legs, and dark or even black bones; they have, moreover, a fully-developed tuft on the head, five toes, and are feathered on the legs and feet.” Peculiarities such as these were invaluable for the experiment. He found the produce of a silk cock with a common white hen to be “twelve or fifteen chickens, the whole of which had the black

* Brouzet: *Essais sur l’Education Médicinale des Enfants*. Paris, 1754. (Quoted by Lucas.)

† *Précis d’Anatomie Transcendante*. Paris, 1842, p. 238. Dr. Lucas is in error when he attributes to Florens the conception and demonstration of this important point. It is true Florens himself claims it in his last work, *Cours de Physiologie Comparée*, 1856.

skin, black mouth, and five toes of the silk cock—his external development. As to their plumage, I could only judge in the case of four, the rest having died in the downy state. Of these four, then, they have all the black skin and five toes of the silk cock, but, strange enough, while three of them have downy plumage, the other has feathers.”

Besides this very remarkable perturbing influence, we must also consider the phenomenon of *atavism*, or ancestral influence, in which the child manifests striking resemblance to the grandfather or grandmother, and not to the father or mother. The fact is familiar enough to dispense with our citing examples. How is it to be explained? It is to be explained on the supposition that the qualities were transmitted from the grandfather to the father, in whom they were *masked* by the presence of some antagonistic or controlling influence, and thence transmitted to the son, in whom, the antagonistic influence being withdrawn, they manifested themselves. As Longet remarks, “S’il n’y a pas héritage des caractères paternels il y a donc au moins *aptitude* à en hériter, disposition à les reproduire, et toujours cette transmission de cette aptitude à de nouveaux descendants, chez lesquels ces mêmes caractères se manifesteront tôt ou tard.”* Mr. Smith, let us say, has a remarkable aptitude for music; but the influence of Mrs. Smith is such that their children, inheriting her imperfect ear, manifest no musical talent whatever. These children, however, have inherited the disposition of their father in spite of its non-manifestation; and if, when they transmit what in them is latent, the influence of their wives is favourable, the grandchildren may turn out to be musically gifted. In the same way Consumption or Insanity seems to lie dormant for a generation, and in the next flashes out with the same fury as of old. Atavism is thus a phenomenon always to be borne in mind as one of the many complications of the complex problem. Very remarkable is the atavism exhibited by some of the lower animals, who bring forth young so utterly unlike themselves as to have been long mistaken for different species; while these young in their turn bring forth animals exactly like their ancestors. Here the children of one generation always resemble their grandfathers and grandmothers, and never their fathers and mothers.†

A third cause of complication is one which we propose to call “the potency of race or individual.” Both father and mother transmit their organizations, but they do so in unequal degrees: the more potent predominates; just as if you mix brandy with equal amounts of water, soda water, and ginger beer, the taste of the brandy will predominate more in the water than in the soda water, more in the soda water than in the ginger beer.

According to Rush (quoted by Lucas), the Danes, intermarrying with women of the East, always produce children resembling the European type; but the converse does not hold good when Danish women intermarry with the men of the East. Klaproth observes the same in the mingling of the Caucasian and Mongolian races. Girou, after five-and-twenty years’ experience in the breeding of sheep, found this “potency” destroy his calculations. He fancied that, by means of his Roussillon sheep and the Merino rams, he could sooner arrive at the fineness of wool which distinguishes the Merino, than if he coupled the Aveyron sheep with the Merino rams; but he found that the Roussillon type resisted the Merino so energetically that, after a quarter of a century of successive crossings, it still reappeared, whereas the Aveyron sheep had long ceased to be distinguishable from the Merinos. The same potency of particular species is noticeable in plants. Koelreuter is quoted by Burdach as having fecundated the *Nicotiana paniculata* with the pollen of *N. rustica*; and the hybrids thus produced were fecundated with the pollen of *N. paniculata*, but the plants resembled the *N. rustica*. On reversing this experiment, he still

* *Traité de Physiologie*, ii. 133.

† See Steenstrup on *The Alternation of Generations*; and Owen on *Parthenogenesis*.

found the female *N. rustica* to have the preponderance; so that, cross the species how he would, the *N. rustica* showed most potency.

But although we thus see that Race has a marked preponderance, we must also remember that it is subject to the individual variations of vigour, health, age, &c. Girou sums up his observations with this general remark: the offspring of an old male and a young female resembles the father less than the mother in proportion as the mother is more vigorous and the father more decrepit; the reverse is true of the offspring of an old female and a young male. In fact, if we consider that the offspring reproduces the organization of its parents, and, consequently, the organization of *that particular period*, we see at once that age, health, and general potency of organization, must be taken into the account of complicating causes. This also will help to explain—but not wholly explain—the great differences observable in the same family: differences of sex, of strength, and appearance. At present, however, science can only take note of it as a “perturbing influence.”

Our survey of this great subject, brief though it has been, has enabled us to note four general facts, which sum up the present state of knowledge, and which must be steadily borne in mind in all inquiries into Hereditary Influence:—

1st. Heritage is constant: it is a law of organized beings that the organization of parents should be transmitted to their offspring.

2nd. The offspring directly represents both parents, and indirectly it represents its ancestors.

3rd. The offspring never represents its parents with absolute equality, although it represents them in every organ. Sometimes one parent predominates in one system, sometimes in another, sometimes in all.

4th. The causes of this predominance are various, some being connected with “potency” of race, or individual superiority in age, vigour, &c.; others being, in the present state of knowledge, not recognisable.

Leaving these facts without any hypothetical explanation for the present, let us pass on to a consideration of the meaning of the Law of Variation, which we have seen to be so perturbing an influence. Like produces like: that is the Law of Constancy. But we see it producing *unlike*, and the variation must have its cause. Development, whether taking place in a simple tissue or in the whole organism, must proximately arise from some alteration in the series of organic combinations. A cellular tissue would never develop into a nerve tissue, unless some new element were introduced into its composition. A whole dynasty of blockheads would never produce a man of genius by intermarriage with blockheads; the intermarriage must introduce “new blood.” There is no chance in Nature. If two parents produce a child which is unlike them both, this child is not an accident: the unlikeness consists in the new combination of old elements. The cipher which stood before the numeral, thus 01, has been transposed, and we have 10 as the result. Nature transposes in this way. Out of several elements of carbon, hydrogen, and oxygen, in the same proportions, she will arrange substances so various as starch, gum, and sugar. We need not be surprised, then, if, with elements so complex as those of an organism, a great variety of combination is produced; and, far from marvelling because children sometimes are unlike their parents, the marvel truly is that they are ever like them.

The old theories could make nothing of these variations; they quietly ignored them. The once dominant, and still famous, theory of the “pre-existence of germs,” which lingers in the popular expression of the “oak being contained in the acorn,” maintained that the embryo is the animal in miniature. The early microscopists observing the gradual appearance of the organs, jumped to the conclusion that the organs pre-existed in the ovum, and were gradually unfolded to view as they became larger. Indeed, when we see an egg by no

means increased, either in size or weight, suddenly open, and a full-formed chick emerge, the idea that the chick was pre-existent in that liquid mass which once constituted the egg seems plausible enough. Swammerdam and Malebranche pushed this notion to its logical conclusion, and declared that not only was the embryo a miniature of the adult, but the first created embryo of each species necessarily contained within itself all the germs of the future race; so that each generation included all subsequent generations. This is the famous *théorie de l'emboîtement*, which was advocated even by Cuvier. That Bonnet, Haller, and lesser men, should have been seduced by such a theory, is not remarkable, when we consider the state of knowledge in their days; but after C. F. Wolff, Blumenbach, and Von Baer had utterly refuted it, and replaced it by the sounder theory of epigenesis, to find Cuvier still giving it the sanction of his great name is a point to be remembered in the history of opinion. At the present day, we believe no one of any authority maintains the theory of pre-existence. The microscope plainly shows us that, at first, the embryo is *not* like the adult animal in any respect; the resemblance grows as development goes on; the presence of one organ determines the presence of another; and, in the earlier stages, we cannot tell whether the embryo is that of a fish, a reptile, a bird, or a mammal—much less what *kind* of fish, reptile, bird, or mammal. It is the immortal honour of C. F. Wolff to have demonstrated the great law of epigenesis,* by which the parts of an animal are made one *after* another, and *out* of the other; so that each organ may be considered as a secreting organ with respect to the others. Treviranus subsequently adopted this idea of each organ having, as it were, a secretory function with respect to the others; and Mr. Paget has luminously expanded it in his masterly “Lectures on Surgical Pathology.”

When it was believed that animals *pre-existed* in the germs of the original parents, the difficulty of accounting for variations, such as deformities and malformations, was either ignored, referred to “Satanic agency,” or eluded by the convenient supposition that deformed germs also pre-existed. Still there were troublesome facts not to be so got rid of. There were hybrids, for example. No one could say that there were pre-existent germs which were half horse and half donkey, or half wolf and half dog, or quarter wolf and three-quarters dog.

We will not, however, linger over such hypotheses, anxious as we are to glance at matters of more practical interest; among them, the very important question of hereditary *insanity*. Every one is familiar with the fact of the transmission of this terrible malady, but not every one is aware of the extraordinary resemblance sometimes manifested in the nature of the attacks and their periodical recurrence. Moreau relates the case of a man who, greatly agitated by the events of the French Revolution, shut himself up in one room, from which he never stirred during ten years; his daughter, on reaching the age at which he was attacked, fell into the same state, and could not be made to quit her apartment. Esquirol tells of a lady who in her twenty-fifth year went out of her mind after her accouchement; her daughter was afflicted in the same way, at the same age, and under the same circumstances. We cannot here afford space for more illustrations;† the two just cited will suffice to indicate the tragic fact, that insanity is not only transmissible, but may suddenly manifest itself in persons who have hitherto shown no predisposition to it. The fact forces upon every mind an awful sense of responsibility, when a parent or guardian has to decide on permitting a marriage where the “hereditary taint” exists. It is a subject which has recently been handled in four

* *Theoria Generationis*, 1795; and in a more popular version of the same work, *Theorie von der Generation*. We have never seen the first-named work; the second we can commend to philosophic readers.

† Dr. Forbes Winslow might take up this topic in his valuable *Journal of Psychological Medicine* with good effect.

fictions: in the "House of Raby," in Miss Jewsbury's "Constance Herbert," in Holme Lee's "Gilbert Massenger," and in Wilkie Collins's "Moncktons of Wincot Abbey." The three first named have used it not only as a tragic pivot, but as a moral lesson; and in so doing have taken the licence of fiction to promulgate very absolute moral views, upon which it is our duty to make some remarks.

These writers all assume that the transmission of the malady is inevitable, and hence they insist on the duty of renunciation. No one with the "hereditary taint" is justified in marrying. He must bear his burden; he must not compromise for selfish enjoyments the happiness of descendants. Were the problem really so simple as these writers make it, their moral conclusions would be indisputable. But artists are not bound to be physiologists, and are assuredly bad law givers in such cases. As artists, they employ their permitted licence in simplifying the problem of insanity to suit their stories; but when they transcend the limits of art, and moralize on their selected cases, placing them before the world as typical, they commit a serious error, and they teach questionable doctrine, because they teach it by means of fallacious facts. Let us be understood. If it were absolutely *certain* that a man whose family had the "hereditary taint" could not escape the terrible inheritance, the moral rule would be clear, the verdict against his marrying would be absolute. But happily this is by no means the case. The law of variation here intervenes. Vulgar observation confirms science in declaring this inheritance of insanity to be very *uncertain*. "*La transmission héréditaire,*" says Burdach, in summing up, "*ne s'étend, la plupart du temps, qu'à quelques enfants.*" In many cases the malady is not transmitted at all. That is to say, it is so neutralized by the influence of the other parent as not to manifest itself. Out of three children, two may inherit the malady—or only one—or none. Are all three children to be debarred from marriage on the chance that one or all may be affected? But the difficulty is further complicated. The three children, let us say, are perfectly healthy, passing into manhood and womanhood without once indicating any trace of the disease; suddenly, in mid-life, the disease breaks out,—for we are never certain of its non-appearance. Again, the three marry, have children, and die, without manifesting any of the fatal symptoms of the disease; yet their children may all be insane, because the law of *atavism* intervenes to frustrate calculations.

With such facts before us, consider the straits into which we are driven by the novelist's verdict. Three perfectly sane people are not to marry because there is a possibility of their one day becoming insane, or of their children inheriting the grandfather's malady. The same difficulty meets us in the case of *consumption* and *scrofula*, two diseases equally transmissible and almost as terrible. Are all the families in whom the consumptive "taint" exists to be excluded from marriage? To say so would be to make marriage a rarity, since few indeed among English families could be found in which no consumption has appeared during two generations. Such difficulties the novelist eludes. Yet in real life these difficulties must be met. For our own parts, while fully sensible of the responsibility, we frankly confess that we should hesitate before pronouncing against marriage, even when one of the lovers had already exhibited unequivocal signs of insanity or consumption. Nor is this said from any love of paradox; it is quite serious, as the reader will admit when he considers that the probability of transmission to children is very *uncertain*, and is entirely dependent on the other parent. A man with tubercles already formed may marry one woman who shall bear him children all perfectly healthy; whereas another woman would bear him children all inevitably doomed. It is entirely a question of organic combination; one parent's influence being neutralized or fostered by the influence of another. The same is true, if we take the case of a woman with tubercles marrying a healthy man.

Although everything depends on the constitution of the untainted parent,

there is a further difficulty with human beings not felt with animals: we allude to affection, which does not spring up when bidden. You may pair your dogs and cattle according to theory; human beings must pair according to far other impulses. Nevertheless, the parent or physician who has to adjudicate in these delicate cases, may gain some guidance from general principles. We have seen that the predominance of one parent mainly consists in a superior potency which is derived from race, age, health, &c. Thus, a young man in whom the hereditary taint is visible might fall in love with a woman some few years his senior, who, to superiority of age, might add that of belonging to a more vigorous race. There would be scarcely any danger in such a marriage. But reverse the conditions—let the woman be younger, and of a less vigorous race, and marriage would present such probabilities of danger that every means of prevention should be employed. At the best, our judgment can be given with great hesitation, for the laws of organic combination, on which parental influence depends, are as yet wholly unknown.

We must forbear entering upon the many interesting topics which the application of the laws of heritage suggest, and conclude this paper with a glance at the influence of these laws in the development of the human race. History is one magnificent corollary on the laws of transmission. Were it not for these laws, civilization would be impossible. We inherit the acquired experience of our forefathers—their tendencies, their aptitudes, their habits, their improvements. It is because what is organically acquired becomes organically transmitted, that the brain of a European is twenty or thirty cubic inches greater than the brain of a Papuan, and that the European is born with aptitudes of which the Papuan has not the remotest indication. Mr. Herbert Spencer, in his very original and remarkable “*Principles of Psychology*,” quotes the evidence of Lieut. Walpole, that “the Sandwich Islanders, in all the early parts of their education, are exceedingly quick, but not in the higher branches; they have excellent memories, and learn by rote with wonderful facility, but will not exert their thinking faculty;” which, as Mr. Spencer truly observes, indicates that they can receive and retain simple ideas, but are incompetent to the more complex processes of intelligence, because these have not become organized in the race. A similar fact is noticed in the Australians and Hindoos. Nor is this wide difference between them and the Europeans confined to the purely ratiocinative processes; an analogous difference is traceable in their moral conceptions. In the language of the Australians there are no words answering to our terms *justice*, *sin*, *guilt*. They have not acquired these ideas. In all savages the *sympathetic* emotions are quite rudimentary, and the horror which moves a European at the sight of cruelty would be as incomprehensible to the savage, as the terror which agitates a woman at the sight of a mouse. What we observe in the development from childhood to manhood, we also observe in the development of the human family, namely, a slow subjection of the egotistic to the sympathetic impulses. This has been overlooked, or not sufficiently appreciated, in the dispute about a moral sense. One school of thinkers has energetically denied that we are born with any moral sense; another school has energetically affirmed that we are born with it. And of the two we think the latter are nearest the truth. It is certain that we are so organized as to be powerfully affected by actions which appeal to this “moral sense,” in a very different way from mere appeals to the intellect—the demonstration of abstract right and wrong will never move the mind to feel an action to be right or wrong; were it otherwise, the keenest intellects would also be the kindest and the justest. What is meant by the “moral sense” is the aptitude to be affected by actions in their moral bearings; and it is impossible to consider various individuals without perceiving that this aptitude in them varies, not according to their intellect, but according to their native tendencies in that direction. This aptitude to be so affected is a part and parcel of the

heritage transmitted from forefathers. Just as the puppy pointer has inherited an aptitude to "point"—which, if it do not spontaneously manifest itself in "pointing," renders him incomparably more apt at learning it than any other dog—so also has the European boy inherited an aptitude for a certain moral life, which to the Papuan would be impossible. "Hereditary transmission," says Mr. Spencer, displayed alike in all the plants we cultivate, in all the animals we breed, and in the human race, applies not only to physical, but to psychical peculiarities. It is not simply that a modified form of constitution, produced by new habits of life, is bequeathed to future generations; but it is, that the modified nervous tendencies produced by such new habits of life are also bequeathed: and if the new habits of life become permanent, the tendencies become permanent.* As a consequence of this inheritance we have what is called national character. The Jew, whether in Poland, in Vienna, in London, or in Paris, never altogether merges his original peculiarities in that of the people among whom he dwells. He can only do this by intermarriage, which would be a mingling of his transmitted organization with that of the transmitted organization of another race. This is the mystery of what is called the "permanence of races." The Mosaic Arab preserves all the features and moral peculiarities of his race, simply because he is a descendant of that race, and not a descendant of the race in whose cities he dwells. That the Jew should preserve his Judaic character while living among Austrians or English, is little more remarkable than that the Englishman should preserve his Anglo-Saxon type while living among oxen and sheep; so long as no intermarriage takes place, no important change in the race can take place, because a race is simply the continual transmission of organisms. The Scotchman, "caught young," as Johnson wittily said, will lose some of the superficial characteristics, but will retain all the national peculiarities of his race; and so will the Irishman. "We know," says Mr. Spencer, "that there are warlike, peaceful, nomadic, maritime, hunting, commercial races—races that are independent or slavish, active or slothful; we know that many of these, if not all, have a common origin; and hence there can be no question that these varieties of disposition have been gradually induced and established in successive generations, and have become organic." This, indeed, is evident *à priori*; we have already seen that the instincts and habits, even the trifling peculiarities of an individual, have a tendency to become transmitted; and, what is true of the individual, is true of the race.†

It is owing to the transmission of incidentally-acquired characters that every great movement in human affairs achieves much more than its immediate object. It tends to cultivate the race. How could that new, unheard-of feeling for the wives, widows, and orphans of soldiers, which so honourably distinguished the war just closed, have ever risen, had not the sympathetic feelings of the race been cultivated during centuries of slow evolution? How could Englishmen manifest their sturdy political independence, their ineradicable love of liberty, so strikingly contrasted with the want of that feeling in other nations, had not our whole history been one bequeathed struggle against the encroachments of governments? It is, however, needless to continue: wherever we look in physiological, psychological, or sociological questions, we are certain to observe the operation of the laws of hereditary transmission.

* Principles of Psychology, p. 526. In this work heritage, for the first time, is made the basis of a psychological system; and we especially recommend any reader interested in the present article, to make himself acquainted with a treatise in every way so remarkable.

† M. Gosse, in a recently-published *Essai sur les Déformations artificielles du Crâne* (Geneva, 1855), shows that the forms artificially impressed on the skull during successive generations tend to become hereditary, and that, consequently, we must assign less value than has been hitherto assigned to those characteristics of distinct races which the forms of the skull have supplied.

STATISTICS OF CAPITAL PUNISHMENT.

The following is a copy of a Return to an Address of the House of Commons, dated May 14th, 1846, signed, "H. MANNERS SUTTON, Whitehall, May 22nd, 1846."

Number of Persons Committed and Executed for each of the following Offences:—

Description of Offence.	During the five years ending with the last year of an execution.		During the five years immediately following.
	Committed.	Executed.	Committed.
1.—Cattle Stealing	144	3	119
2.—Sheep Stealing	1231	11	1320
3.—Horse Stealing	990	37	966
4.—Stealing in a Dwelling House . .	834	9	875
5.—Forgery	296	17	331
6.—Coining	44	8	16
7.—Returning from Transportation .	52	*	50
8.—Letter Stealing	14	1	27
9.—Sacrilege	33	2	33
10.—Robbery	1829	17	1579
11.—Arson, and other wilful Burning	391	42	183
12.—Piracy	52	2	4
13.—Attempts to Murder, unattended with bodily injuries, Shooting at, Stabbing, Wounding, &c. }	687	8	1111
14.—Violation, &c.	278	14	319
15.—Riot and Felony	215	6	68
16.—Other crimes	105	11	118
17.—High Treason	81	8	1
Total	7276	196	7120

	During five years ending with 1832.		During five years immediately following.	
	Committed.	Executed.	Committed.	Executed.
Burglary and House-breaking . . . }	4327	46	3734	3

The return is a statement of the crimes capital in 1830 for which the punishment of death has been abolished by statute, or for which it has not been inflicted during the last five years, giving in columns the number of persons committed and executed for each offence during five years, ending with the

* The last execution for returning from transportation was in 1810. The records in the Home Office do not show the executions for this offence in the five previous years.

The capital punishment for house-breaking was abolished in 1833, and for burglary (except when violence to persons is used) in 1837.—*Parliamentary Paper*, No. 354.

last year of an execution for it, and the commitments during the five years immediately following.

It appears, from this table, that during a period of five years, when the sentence of death was recorded and carried into effect in seventeen separate kinds of offences, there were 7276 committals and 196 executions; whereas, in the five succeeding years, in which there were no executions for any of the aforesaid offences, the committals were 7,120, making a diminution in the number of commitments on the average of 156. Nor do these figures fully represent the case. When the punishment of death for such offences as sheep-stealing, forgery, coining, and the like was in operation, prosecutors were reluctant to prefer the charge; and, consequently, the number of committals did not adequately represent the number of offenders; but when the capital sentence was repealed, this objection was removed; but, taking the figures as they appear, it is quite clear that, contrary to the predictions and arguments of those who still retain a preference for capital punishment, crime did not increase when the capital punishment was abolished.

In analysing this table, two classes of offences require remark:—1. Attempt to murder unattended with bodily injuries, shooting at, stabbing, wounding, &c.; and 2, violation, &c.; the numbers of which are respectively:—

	During the five years ending with the last year of an execution.		During the five years immediately following.
	Committed.	Executed.	Committed.
Attempts to Murder, &c.	687	8	1111
Violation	278	14	319

In the former, where the committals rose to 1111, many were included which it had been customary in the former five years to class as committed for simple assaults, and so indicted to avoid the risk of capital conviction; so in the latter case, since the repeal of the capital penalty, juries convict upon the graver charge about double the proportion in the same number of commitments, taking the average of five years. Formerly many offenders, though capitally indicted, were convicted on the minor count, viz., "assault with intent," and in the criminal tables were recorded in this latter class of offenders, thus reducing the apparent number of commitments on the first five years on the capital charge.

This return is exceedingly interesting, and appears most completely to refute the objections of those persons who still oppose the entire abolition of capital punishment on the ground, as they say, that its abolition would increase crime.

EDUCATION OF IDIOTS.

On Wednesday, December 3, a meeting in support of the Asylum for Idiots, at Essex Hall, near Colechester, the object of which is to train and educate the idiot and imbecile, was holden in the Aldermen's Parlour, at the Town-hall, Cambridge. It was originally intended to hold the meeting in the large room, where specimens of the work of the inmates of the asylum, in the shape of fancy and useful articles, were laid out for inspection; but the state of the weather prevented many persons from being present, and the attendance was so small that the Aldermen's Parlour afforded ample accommodation.

The Rev. the Master of Jesus College was called upon to preside; he was supported by the Rev. E. Sidney, Rev. C. Clayton, R. M. Fawcett, Esq., R. Foster, Esq., Mr. Alderman Brimley, &c., and there were also present Professors Sedgwick and Selwyn, Archdeacon Harper, &c.

The Chairman having briefly stated the object of the meeting, the Rev. C. Clayton moved, and R. Foster, Esq. seconded, the first resolution, which was as follows:—

“That this meeting feels deep sympathy with the condition of the idiot and imbecile, and is strongly impressed with the value of the efforts now making for their amelioration and improvement, and with their claims upon the liberality of a Christian people.”

The Rev. E. Sidney, Rector of Little Cornard, Suffolk, moved the second resolution:—

“That this meeting expresses its sincere gratification at the successful progress of the Asylum for Idiots, particularly with the branch so efficiently conducted at the Essex Hall, Colchester; heartily approves of the erection of the national model Asylum at Earlswood, near Reigate, and agrees to promote subscriptions to this interesting and needful charity.”

He said it was three years that very day since he had the pleasure of submitting to a Cambridge audience some details concerning the Asylum for Idiots: since that time, the experiment had been carried on with more and more success. He stated at that time that it was but an experiment, and it was still so; but there were indications of great ultimate success. There was a time when the idiot was regarded as a poor mindless creature, to be fed and clothed, but kept out of sight: his existence was almost ignored, he was the butt of the thoughtless, and his appearance was held to be revolting. But since the operation of such institutions as the one in question, the position of the idiot was changed; they had grappled with his infirmities, and made many conquests, and had prospect of many more. Science was casting her light upon the case of the idiot, and trying, in conjunction with Christian philanthropy, to find palliatives for his affliction. Now, what did they know about the idiot at the present time? One thing they had learnt—how to distinguish the idiot from the lunatic. Some were born idiots: in other cases they became so from some peculiar state of health. Some had their understanding undeveloped; these he should call idiots proper: others had their understanding partly developed, but were still very imbecile. With the first class, to render existence more comfortable was as much as could be done: with the second class, they could advance so far as to instil ideas of decency. With the mere simpleton they could do a great deal. The principle was to assume that the idiot had a mind like ourselves, but a feeble exhibition of mind due to an organization which is defective. A group of idiots would show every variety of disorder; it was impossible to mention any symptom of disorder which was not visible in a group of idiots. In the midst of these disorders there was some capacity, and the great thing was to observe what that capacity was. With respect to the capacities that idiots did not possess, they were mostly defective in speech, although some were voluble; some were defective in hearing, some in touch—to such an extent, indeed, that you might pinch them and they did not appear to suffer pain or to feel what you were doing. He named other physical defects, and spoke next of their mental defects, such as an absence of the powers of reflection, inference, and invention, and of all sense of morals, religion, and decency. In the midst of these defects, they had some power of distinguishing: if you put before an idiot at dinner-time a piece of board and a piece of bread, he could distinguish between them; he knew what was eatable from what was not. He had also some power of attention and conversation, and was capable of being influenced, for you always found an idiot yield to kindness and firmness. He had also some power of acquisition; and had, in short, feeble appetites, desires, affections, and dislikes.

As soon as a pupil entered the asylum, he was put under the care of one individual, who observed with great patience all that he did, and in an astonishingly short time became acquainted with his characteristics. The first thing was to correct the abnormal condition of health which idiots invariably laboured

under, by careful physical training for the invigoration of the frame, particularly by such exercises as lead to the obedience of the body to the will. These things were the foundation of great improvement; for as the bodily health became invigorated, the mind developed itself. In a conversation which he (Mr. Sidney) had with Prince Albert, his Royal Highness said, "Don't you think fencing a good thing?" He (Mr. S.) replied that it was the best thing possible, because every well-directed muscular action implied a willing attention which improved the mind. They had attempted to teach the usual branches of education, and had succeeded; but it was necessary to proceed with extreme care. One boy was observed to like bowling; he could not read a single letter, but the master carved the letters on the top of the pins, and whenever the bowl knocked a pin down, he was not allowed to knock down another until he had named the letter, and thus he became able to read the Bible. How they taught reading, writing, and arithmetic was extraordinary; many curious appliances were used. One boy never could fix his eye upon anything, but he was brought to do so by catching a great glare, and children were now taught their letters by drawing them in phosphorus in a dark room. There was one boy who seemed to be quite unable to speak; but he was introduced three years ago into a room where there was a Christmas-tree, and immediately he cried out "tree, tree." But the best appliance for the instruction of idiots was the black board. The eye was the idiot's best power, and by the careful use of the black board, almost anything was taught by means of imitation lessons. The patience, care, and anxiety of the matter were almost inconceivable. Models were brought before them; they were taught with great difficulty to name objects. They were also taught mental arithmetic, which they learnt in a wonderful manner. The other day, he (Mr. Sidney) asked them this question—how much is one-half of two-thirds of three-farthings? After a few moments, a boy answered a farthing. The object lessons were exceedingly interesting. A piece of mahogany, for instance, was taken; they named it, and then you might engrave upon that almost anything. By these means much instruction was conveyed; but the patience of the teacher must never flag; the same thing must be repeated hundreds of times. The patience of the household at Essex Hall, and of Mr. Millard especially, was such as he had never witnessed before. It was an exceedingly difficult thing to select persons as teachers; and if idiot asylums should become common, there would be more trouble to get teachers than to get professors for this renowned university. They had taught the pupils good habits and proper demeanour, also something of morals; and the religious impression made upon their minds was wonderful indeed. They were also taught proper carriage, by the method of the drill; and so effectively, that two or three times he had told the officers of the camp near Colechester that he would match a company of idiots against a company of Rifles, or any other corps there. (Laughter). He was really not saying too much, for their drill was beautiful. The medical men were very kind; but the favourite doctor of all was the dentist, who won the heart of the idiot if he told him he must have a tooth out on Saturday.

With regard to statistics, there were 49 pupils at the institution at Earlswood, in Surrey; 26 were writers in books, and 23 on slates. There were 9 readers advanced, and 11 progressing; 10 were in the alphabet, and 10 drawing; 18 were doing imitation lessons; 6 were writers from imitation, and 9 were in arithmetic. The writers from dictation did it well; there was a peculiar aptitude at this in idiots sometimes; indeed, Goethe in his youth once dictated a poem upon Joseph and his Brethren to a poor imbecile. The principal trade was mat-making. At Essex Hall there are 20 boys in arithmetic. One of the officers in attendance upon Prince Albert, when he visited the asylum, asked a boy how much 1000 farthings made, which he answered readily. There were 33 in reading, 25 writers in books, and 13 writers on slates, and 12 in speaking lessons, which was a very curious part of the instruction. There was only one

speechless idiot in the institution ; many appeared to be speechless, but it was found that they were not so. One boy seemed to be unable to speak, but in the middle of the night he burst into one of the chants which he had heard during the day, and he could now speak well. Another boy, thought to be speechless, could write ; one of his companions rubbed out what he had written, upon which he cried out, "Who has rubbed out my slate?" In singing lessons there were 13, and in drilling 44. The marching was beautiful ; they marched to the sound of the bugle. There were 25 girls in the school.

In trades, there were gardeners and tailors, and some of the London tailors sent down garments to be made ; you could never teach idiots to cut out a coat, but they could sew with great neatness ; and if you were ever to go into the room amongst them, they would perhaps show great anxiety to sew on a button. He asked one boy how much he would charge to sew on a button, and he replied a shilling ; but another boy said, "I'm ashamed of you ; I would do it for the honour." They made mats ; the demand for mats was so great that they could not be made fast enough ; the Bishop of Rochester had all the mats for his palace at Danbury made at the asylum. The other day, a boy from Suffolk, who had been placed in the asylum by the Queen, sent a mat to Buckingham Palace, and it was graciously accepted. Alluding to some individual cases, he mentioned that of a boy who was remarkably sullen, and nearly speechless ; he had now come out so wonderfully, that he had drawn two of the beautifully expressive pictures which might be seen in the next room ; he was an admirable artist in wood, and was at this time earning wages as a carpenter, and was allowed pocket-money, because he earned more than was necessary for his support. He was a well-behaved proper person, of gentlemanly manners ; still he was an idiot, and he (Mr. Sidney) did not believe that you could ever trust an idiot to take care of his own fortune ; idiots had no knowledge of money, nor could it be imparted to them. When this boy was told he was to have 5*l.* a-year, nothing could persuade him that it was the same thing as if it were paid in monthly portions. The same boy made a beautiful model of a ship from a picture ; also a black board, with grooves for the letters. He was likewise a most beautiful fencer ; he (Mr. Sidney) once saw him fence with an officer who prided himself upon his skill, and he placed his foil upon the officer's heart. Another boy could be taught nothing at first ; he was most surly, and so savage that when brought to the office, in the Poultry, London, he made such an uproar that a crowd collected. Visiting the asylum one day, in company with the wife of a baronet, some conversation arose about the making of slippers, and an inmate said he would make a pair for 5*s.* 6*d.* ; this boy, however, said he would make a pair for the honour of working for such a lady. He was at first a very dangerous boy, and had three times tried to murder his own mother ; now he was one of the most docile, gentle, and affectionate creatures ever seen. Several other instances of remarkable improvement were cited by the speaker. The last case showed that these poor creatures were capable of religious impressions. A girl was said to be self-willed and sullen, giving great trouble, and being resolved not to do anything she did not like. She became diligent and willing, showing great gratitude, and her mind opened to Scriptural truth in a wonderful way, seeming to verify the assurance that "blessed are the poor in spirit, for theirs is the kingdom of Heaven." She became ill and died ; in her last hours she said, "I am going to Heaven, which is far better." As she was struggling in pain, she was heard to utter these words of the 23rd Psalm—"Thy rod and Thy staff they comfort me," and "I will arise and go to my Father." She died in hope, and left a wonderful example behind her.

Mr. Sidney proceeded to quote the testimony of the Bishop of Rochester, the Chaplain of Parkhurst Prison, and other gentlemen, to the excellence of the institution at Essex Hall. On the 19th of April in the present year,

Prince Albert visited it, and said what a pleasant place it was; the children sang "God save the Queen" upon the occasion. The Duke of Cambridge had also visited it, and was extremely pleased; and the Duke of Wellington spent three hours there, and sent a donation of 50*l*. The number of idiots was far greater than people supposed; it was calculated that there were 50,000 pauper idiots in the United kingdom. Was it not, then, a most interesting subject? They had educated the feeble germs of understanding; they had learnt these poor creatures to read, write, and cast accounts; they had made them love their benefactors, and led them to become acquainted with their God and Saviour. The task was a hard, but not a hopeless one. It was our duty not merely to foster talent, but to elicit capability of love and goodness, and show how great a reward, in a psychological point of view, flowed from educational and moral patience. With respect to what they had done, they had stopped deterioration in all, and shown improvement in many. Many had acquired self-control; most had acquired decency, and some had become useful and happy. There was a latent capacity that could be developed. He did hope, therefore, that Cambridge, whence had issued some of the brightest geniuses that the world ever saw, would not think it beneath her to assist the poor distressed idiot, but would believe that there is a mind to be expanded, and that it might be part of our probation here to lift up those feeble ones, to treat them as brethren, and to point out to them that hope which extends to brighter and better scenes. (Applause.)

R. M. Fawcett, Esq., seconded the resolution, and bore willing testimony to the able manner in which Mr. Sidney had handled the physiological and medical part of the question. He was happy also to bear testimony in some degree to the capability of idiots to acquire a certain amount of knowledge. Some years ago he was one of the visitors of the proposed lunatic asylum in this county, and he thought it his duty at that time to visit asylums in various parts of the country, during those little summer trips which he and others in Cambridge were in the habit of making. He was glad to observe great improvement in the treatment of lunatics, the system of cruel restraint being done away with; but he could not but regret seeing the old modes retained with idiots, who were allowed to sit in corners, or bask in the sun, poor, drivelling, useless cumberers of the institutions. At an asylum near York he observed a great improvement. It contained about 100 lunatics, all usefully employed, only three or four other domestics being required to do the work of the establishment. In a small court-yard, there were from twelve to twenty idiots working a windlass in full animal enjoyment, whereby they supplied the institution with water. It occurred to him then that if these poor creatures had been taken in hand when young, their mental faculties might have been in some measure developed. He was glad therefore to see such an institution as the present, intended for children and young persons who were idiots, and not for those adult pauper lunatics who were contemplated by the Act of Parliament under which county asylums were in process of construction. Mr. Fawcett concluded by drawing attention to some Scriptural texts upon the circular which the friends of the institution had distributed.

The Rev. Professor Sedgwick, who arrived late at the meeting, having been detained on his way from Norwich, proposed the next resolution:

"That the thanks of this meeting be given to the Rev. Edwin Sidney for his kind attendance and interesting statements relative to the Asylum for Idiots."

In the course of his few observations, he alluded to the case of a deplorable idiot whom he remembered as a boy in his native Yorkshire. That boy had no moral training whatever; and the ragamuffins of the place, by their jeers and annoyance, made him worse than could easily be conceived: yet he had extraordinary powers of calculation. The schoolmaster of the place would propose an extraordinary arithmetical problem to this brutal idiot, who would

set to work, knit his brow, and bring out the correct numerical answer. How he did it he could tell no one. The Rev. Professor urged upon his hearers the duty of letting their charity flow in this new stream.

The Rev. Professor Selwyn seconded the motion, and warmly commended the institution to the consideration of the audience upon religious grounds. Alluding to Mr. Sidney's remark, that it was more difficult to find good teachers for idiots than good professors for the University of Cambridge, he noticed the importance to a teacher of a teachable audience: Niebuhr used to say to his class, "Ye are my wings." How difficult, then, must be the task of those who had to deal with these poor idiots!

Mr. Sidney having returned thanks, a vote of thanks to the Chairman and the Mayor was passed, on the motion of the Rev. F. Gell, seconded by the Rev. J. Y. Nicholson, which the Chairman acknowledged, and the meeting broke up.—*Cambridge Chronicle*.

INSANITY AMONG THE CONVICTS AT PENTONVILLE, MILBANK, AND DARTMOOR PRISONS.

WE extract the following interesting particulars from the last Parliamentary Report of the *Directors of Convict Prisons*. With respect to Pentonville, Mr. C. L. Bradley, the highly intelligent and active medical officer, reports as follows:—

Two cases of insanity have been removed to Bethlehem Hospital; the following are the particulars thereof:—H. G., 5960, attracted notice on admission by a peculiarity of manner, and in a short time afterwards his conduct and conversation were sufficiently strange to lead to doubts being entertained of his sanity. He was placed under observation and treatment in the infirmary, and eventually it became apparent that he was the subject of insane delusions. The result of inquiries into the previous history of the prisoner were at first obscure and contradictory; at length the following reliable account was obtained from the clergyman of his parish:—the prisoner, he stated, had been formerly an industrious and respectable man, a regular attendant at his church, but after sustaining heavy pecuniary losses, became dejected and "perplexed himself by an over-curious reading of the Bible," and finally, without any assignable motive, fired a neighbour's haystack. Connecting this history with the delusions exhibited by the prisoner in Pentonville, there is much reason to believe that the crime of arson, with which he was charged, was committed under the influence of mental disease, but which required long-continued and close observation for its detection.

G. W., 6044, was received into Pentonville to undergo a second probationary period of separate confinement for extreme idleness and insubordination at the public works. From the first he refused to work, and obstinately persisted in that determination. He was at times violent and generally abusive; occasionally his conversation was such as to lead one to hesitate whether to refer it to audacity and impudence, or to actual incoherence. The character given him by those who had had charge of him in other prisons was to the effect that he was idle, ill-conducted, and an impostor. He was placed in the infirmary under close surveillance for some months without any marked change, except that his conversation became more incoherent; but there were still many features, both in the history and general aspect of the case, which for a time justified a grave suspicion that the incoherence was simulated. At length, however, more decided indications of mental disease were developed, and the prisoner was removed from the prison as a lunatic. In the above cases, two of the most difficult to pronounce an opinion upon of any I recollect to have occurred during a medical experience of thirteen years at this prison, I had the advan-

tage of obtaining the able assistance of Dr. Forbes Winslow, whose name as a psychologist is so well known.

F. M., 5695, a prisoner sent here to undergo a second period of separate confinement, exhibited soon after his admission an irritable state of mind, and entertained groundless suspicions as regards treatment by the officers. At one time he maintained that suffocating vapours were introduced at night into his cell through the air-flues. Under the treatment employed the delusion disappeared, and his mind was restored to a healthy condition.

Four cases of "mental irritability" are noticed in the tables (p. 36). In two cases the prisoners suffered from dyspepsia, and imagined that their illness was caused by detelerious substances clandestinely mixed by the officers with the food supplied to them. The third fancied he was in the possession of an important secret connected with religious subjects, which he refused to disclose. The fourth asserted that he was made unhappy by being suspected and pointed out by the officers as guilty of vicious practices. Although it would appear from the above statement that delusions were observed in these cases, yet they were not sufficiently "fixed" or absurd to be regarded as *insane* delusions, but, nevertheless, were indications of a mental condition, which, under adverse circumstances, would probably have terminated in actual mental disease. By suspending the discipline of separation, and using suitable moral and medical treatment, recovery to health was obtained, and the mind regained its equilibrium.

W. G., 5971, hanged himself in his cell in the fourteenth month of his imprisonment here. He had never exhibited any indication of mental affection, and his health during the whole period of his confinement was perfect. He was industrious at his trade, and had made considerable progress under the schoolmaster. He had never been punished for a prison offence. After his death, it was discovered that he had indulged the hope of soon regaining his liberty, which was annihilated by the notices recently issued to prisoners sentenced to penal servitude. The unexpected prospect of a protracted imprisonment may with great probability be regarded as having in the above instance led to the commission of an act of suicide.

Two Chinamen attempted to hang themselves in the cells shortly after their admission, but were saved from harm by the timely interference of an officer. They were removed from the prison as unfit subjects for separate confinement.

Two prisoners attempted suicide by strangulation while under punishment in the dark cells. The prisoners stated that they were tried of life, and one was ascertained to have attempted suicide in other prisons twice before.

There were also three cases in which the attendant circumstances rendered it morally certain that the attempts were feigned, with a view to excite sympathy or create alarm.

Whenever the medical officer had reason to believe that "separation" was likely to act injuriously upon the mental or bodily health, the discipline was suspended, and the prisoner permitted to work in association with others. The total number requiring the medical officer's interposition in this respect was 23; 10 on account of ill health, and 13 on mental grounds. The above measure in some cases no doubt averted positive injury, but was in all cases attended with benefit.

Three prisoners were removed from the prison on mental grounds shortly after admission—namely, the two Chinamen before noticed as having attempted suicide, and P. M., an excitable Irishman, who had formerly been a hard drinker, and had severely injured his skull.

Of Milbank, Dr. Baly reports:—The account of mental diseases amongst the prisoners during the past year is a favourable one. Six men were removed to Bethlehem; and two other men who were insane for a short period, recovered in the prison. Three of those removed were insane in 1854 (one of them received insane), and they were included in last year's return. Of the other

three, M. I. was insane when he was received; another, T. H., was believed to be an imposter, but, on account of his extraordinary conduct, it was deemed right to submit his case to the judgment of the physician practising in the department of lunacy, who gave a certificate of his insanity, and he was removed to Bethlehem Hospital; but he exhibited no symptom of insanity in that establishment, and has been returned to the prison. The third, J. S., was suddenly attacked with mania three months after his reception, without any apparent cause.

The two men who became insane in the prison but recovered under treatment there, were both of very weak intellect when they were received. One of them, J. H., while recovering from cholera, was seized with epilepsy, from which he had suffered previously, and was left by the epileptic attack in a state of dementia, which continued about seven weeks. The other, F. B., was attacked with epilepsy, according to his statement for the first time in his life, on the day of his reception from Perth, where he had been ten months in separate confinement, and five days afterwards he was seized with acute mania; he recovered in little more than a fortnight. The cases of J. S. and F. B. are therefore the only ones occurring during the past year that can with any probability be referred to the influence of imprisonment.

Dr. J. Campbell, the medical officer of the Dartmoor Prison, reports as follows, respecting the mental condition of those under his kind care:—

Chronic diarrhœa has been the cause of removal to this place in several instances, and as the complaint has commonly been of long standing or complicated with disease of the lungs, it has proved very intractable. Two of the invalids received during the year for this disease have died of pulmonary consumption, and a third is now in a precarious state from the disease itself.

Scrofula.—Considering the great number of prisoners labouring under scrofulous diseases, the cases admitted into the infirmary have not been numerous. The most common form has been suppurating glands of the neck, but there were also several cases of diseased bones and joints, also large abscesses about the chest and lower extremities. Some of these cases proved tedious from impairment of the constitution; but when unattended by any marked disease of the internal organs, the change to this place soon exerted a beneficial influence; and most of the cases are either progressing favourably or have terminated in a satisfactory manner.

From there being upwards of 80 prisoners in this establishment of weak or doubtful mind, such cases are frequently brought to my notice. Although few appear on the sick list for mental affections, we have commonly about half-a-dozen in the infirmary for the treatment of other diseases, particularly catarrh, diarrhœa, and epilepsy, those being the complaints to which this class of invalids appear peculiarly liable. When suffering from bodily disease, those men are generally more troublesome, and subject to fits of excitement which render the greatest vigilance necessary. Two cases have been recommended for removal during the year:—1st, No. 2,665, R. D., was received from Portland Prison, September 6th, 1854, for “imbecility of mind, violent, and intractable.” He maintained the same character here, and as he was several times in the hospital for the treatment of slight bodily ailments, as well as for observation, I had frequent opportunities of watching him, which confirmed my opinion of his insanity. As he was guilty of repeated acts of violence and assaults upon officers, the last being an attempt to knock an officer down with a spade, I deemed it necessary to recommend his removal to a lunatic asylum. 2nd, No. 3,143, J. J., was received from Northampton Gaol in August, 1855, the cause of removal being “weak mind, and unfit for separation;” and his whole conduct was so eccentric and violent as to leave no doubt in my mind of his insanity. His manner was very peculiar, and he was guilty of various serious and dangerous acts; such as burning his Bible, prayer, and other books in his cell, stating as his reason, “he could not derive any benefit from them;”

breaking articles of furniture in the cell, as well as the window, without the slightest provocation, and frequently threatening the lives of the officers. It was considered unsafe to allow him to associate with other prisoners, and an inquiry into the state of his mind resulted in an order for his removal to Bethlehem.

A great many of the weak-minded prisoners are, however, harmless, and even industrious, which reflects great credit on the careful management of the officers; but, as I have before observed, there appears to me a necessity for a more complete separation between the weak-minded and healthy prisoners, as their eccentricities give rise to remarks which irritate and excite them. It would also bring them more prominently under the notice of the officers in charge of the working parties.

Mental affections have been rather on the increase during the year, the number of admissions being forty, which, added to those remaining at the close of 1854, give a total of 105. Such cases must, at all times, be a source of anxiety to those in charge, as even when the malady is in its mildest form, such as eccentricity or incoherency, they are liable to become excited and violent when least expected, and necessarily require the most careful supervision.

NEW COMMISSIONER IN LUNACY.

It is our painful duty to announce the death of Dr. Hume, who for so long a period occupied the honourable post of one of the medical Commissioners in Lunacy. This physician was much honoured and esteemed by all who had the pleasure of his acquaintance. Dr. Nairne, one of the physicians to St. George's Hospital, has been appointed by the Lord Chancellor to the vacant commissionership.

DR. CONSTANTINE SEIFERT.

This distinguished physician has recently been on a visit to England, as a Commissioner from the Russian Government, inspecting the public and private asylums of this country, and investigating the whole subject of lunacy. Previously to his visiting England, Dr. Seifert had been on a tour through Italy, France, and Belgium, on a similar errand. He visits the asylums of Germany before returning to Russia. Dr. Seifert is one of the physicians to the Imperial Lunatic Asylum of St. Petersburg. He is a man of great ability, knowledge, and intelligence. He leaves England, we are happy to record, highly impressed in favour of the English and Scotch asylums.

DR. THOMAS MAYO.

The election of this eminent physician to the high and honourable office of *President of the Royal College of Physicians*, consequent upon the death of Dr. Paris, is entitled to more than a passing notice. We have, on more than one occasion, considered it to be our duty to oppose in this journal some of the medico-psychological and judicial opinions propounded by Dr. Mayo; we nevertheless are glad to avail ourselves of this opportunity of fully and freely acknowledging this physician's varied attainments, great talents, and undoubted private worth. As an accomplished and vigorous writer, acute and logical thinker, he occupies a high and enviable position among his contemporaries. Dr. Mayo's scholastic and literary acquirements are of the highest order. We feel assured that he will gracefully wear the laurels that have fallen upon him; and that all the anxious and responsible duties of his elevated position will be discharged with honour to himself and with satisfaction to the profession, of which he forms so bright an ornament.

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ART. I.—NEGLECTED BRAIN DISEASE—SUICIDE.

(BY THE EDITOR.)

It is a question entitled to the serious consideration of the practical physician and medical pathologist, whether there has not been of late years a marked increase in the number of cases of disease of the brain and nervous system? We think the fact is indisputable. Physicians who have favourable opportunities of investigating this subject not only agree in opinion that such diseases are of more frequent occurrence, but that a certain unfavourable (but in its incipient stage, certainly not incurable) type of cerebral disorganization develops itself in the present age at a much earlier period than formerly. Softening of the brain, for example, now often manifests itself at the early age of thirty and thirty-five! It is indeed lamentable that the brain and mind should yield to the influence of certain noxious moral and physical agents, at a time of life when the intellect ought to be in an active and vigorous condition of exercise and health.

We cannot, in this essay, enter at length into an analysis of the causes of so sad a state of cerebral degeneracy. That the brain in the present day is overworked—that its psychological functions are unduly exercised, strained, and taxed in the great effort required, in the severe struggle and battle of life, to obtain intellectual supremacy, professional emolument and status—is a fact which the physician specially engaged in the treatment of this class of maladies cannot ignore. It is difficult to say why that portion of the delicate nervous tissue so intimately and mysteriously

associated with the phenomena of mind should be more amenable, in the present epoch, to the influence of those causes which are known to exercise an injurious influence upon the organ of thought. Has the brain deteriorated in its structure? has it less power of resisting the effects of agents brought to bear upon its functions? It is an admitted fact that the type of nearly all classes of disease has, within the last fifteen or twenty years, undergone a material modification. We rarely witness the *acute* and *sthenic* diseases of our early days, requiring for their successful treatment active and anti-phlogistic remedies. Something is certainly due to the advance made of late years in the science of pathology and therapeutics; but this does not altogether explain the fact referred to. Although the average duration of life *appears* to be greater than formerly, there can be no doubt that the *power of vital resistance has sensibly diminished, and that not only the brain, but other important organs, more readily yield to the influence of disease*. The altered habits of society are to some extent dependent upon this condition of the vital organism. However disposed we may be in the present day to exercise a rigid temperance in all that concerns life, the human constitution cannot bear with impunity and safety a great amount of stimuli and mental work. This was not the case in those halcyon days, as they were termed, when men were recognised as being two, three, four, and five-bottle men. This happy change in the social habits of society is certainly, in a great measure, attributable to the social advance of the age and the improved state of morals; but to some extent may not these altered and temperate habits arise from a consciousness of our inability to live above par, as men were accustomed to do thirty or forty years back? We think, in a degree, the fact admits of this explanation. It is, however, the purport of this paper more especially to direct professional attention to the inexcusable neglect with which the affections of the brain are generally treated by the public, and the lamentable amount of ignorance that unhappily exists in the non-professional mind respecting these disorders. This neglect and ignorance is fraught with much irremediable mischief—alas! often leading to the sacrifice of valuable human life. The poor overwrought brain meets with but little attention and consideration when in a state of incipient disorder. The faintest scintillation of mischief progressing in the *lungs, heart, liver, and stomach* immediately awakens alarm, and medical advice and treatment are eagerly sought; but serious well-marked symptoms of brain disorder are often entirely overlooked and neglected; such affections frequently being permitted to exist for months without causing the faintest shadow of uneasiness or apprehension in the mind of the patient or his friends. Morbid alterations of temper—depression of spirits,

amounting sometimes to melancholia—headache—severe giddiness—inaptitude for business—loss of memory—confusion of mind—defective power of mental concentration—the feeling of brain lassitude and fatigue—excessive *ennui*—a longing for death—a want of interest in pursuits that formerly were a source of gratification and pleasure—restlessness by day and sleeplessness by night—all obvious indications of an unhealthy state of the functions of the brain and nervous system, rarely, if ever, attract attention until the unhappy invalid, becoming unequivocally deranged, commits an overt act of insanity. Then the exclamation is, “Poor fellow, his mind has been affected for months!” and no one expresses any surprise that he should, in such a state of mental disorder, have hung himself or cut his throat! It is difficult to induce the public to take a common-sense and right view of this important subject; for if the saving of life is our object, it is to the *public* mind we must plainly address ourselves. If a person, in a previous state of mental and bodily health, is conscious that abnormal changes are taking place in the mind—that trifles worry and irritate—that the brain is evidently unfit for work—that the spirits are flagging—that all the evils of life are magnified; if he is disposed to be fanciful—imagining things to exist that have no existence apart from himself—believing that kind friends ill-use and slight him;—if symptoms like these, or analogous to these, are associated with headache, derangement of the stomach and liver, and want of continuous sleep, *the patient may assure himself that the state of the brain is abnormal, and requires careful consideration and treatment.* How often such apparently trifling symptoms of brain disorder precede the fatal act of homicide and suicide! How much may be said for those driven by unrecognised and neglected disorder of the brain and mind to acts of self-destruction!

The sad and premature death of a gifted child of genius, poor HUGH MILLER, has led us into the above train of thought. How mysterious is the act of suicide—how difficult it is to reconcile with our *à priori* knowledge of the instincts of human nature the fact that a person can deliberately commit an act of self-destruction! There is no feeling so strongly implanted in us as the love of life. It is an instinct of nature to strive to preserve our being, and an instinct cannot easily be overpowered and crushed. One of our poets, in alluding to this subject, after declaring life to be the dream of a shadow, “a weak-built isthmus between two eternities so frail that it can neither sustain wind nor wave,” yet avows his preference of a few days’ nay, a few hours’ longer residence upon earth, to all the fame which wealth and honour could bestow:—

“Fain would I see that prodigal who his to-morrow would bestow
For all old Homer’s life, e’er since he died till now!”

"Is there anything on earth I can do for you?" said Taylor to Dr. Wolcott, as he lay on his death-bed. The passion for life dictated the answer—"Give me back my youth." These were the last words of the satirical buffoon. There is an anecdote recorded of one of the favourite Marshals of Napoleon, the Duke de Montebello, which finely illustrates the strength of this instinctive principle. During a battle in the south of Germany the Duke was struck by a cannon-ball, and so severely wounded that there was no hope of a respite. Summoning the surgeon, he ordered his wounds to be dressed, and when help was declared unavailing the dying officer, excited into a frenzy by the love of life, burned with vindictive anger against the medical attendant, threatening the heaviest penalties if his art should bring no relief. The dying Marshal demanded that Napoleon should be sent for as one who had power to save; whose words could stop the effusion of blood from the wound, and awe nature itself into submission. Napoleon arrived just in time to witness the last fearful struggle of expiring nature, and to hear his favourite Marshal vociferate, as the lamp of life was just being extinguished, "Save me, Napoleon!" We have heard of a similar instance in humble life. A man on the point of death vowed he would not die, cursing his physician, who announced the near termination of his life, and insisting that he would live in defiance of the laws of nature! In both these cases we see clearly manifested the passion for life, the instinct of self-preservation which it is almost impossible to master.

It is recorded of Louis XI. of France, that so desperately did he cling to life when everything warned him to prepare for death, that he, in accordance with the barbarous physiology of that age, had the veins of children opened and greedily drank their blood; hoping in this way to fan the dying embers into a flame.

So much for the normal, the healthy, and natural instinct, LOVE OF LIFE. Let us consider this instinct in a disordered or perverted state.

The life of the celebrated author of the "Testimony of the Rocks," "The Old Red Sandstone," "My School and Schoolmaster," admits of a psychical as well as a medical consideration. An American contemporary* has so ably analysed the psychological features of this remarkable man, that we find we cannot do better than quote some passages from the sketch referred to. In speaking of Mr. H. Miller's family the writer remarks:—

"In the parentage of Hugh Miller we seem to find support for the popular notion so often referred to, but which statistics have failed to sustain, of the usual preponderance of the maternal stock in the cha-

* "American Journal of Insanity" for April, 1857.

acter of the son. The prominent characteristics of the two maternal uncles appear to have been combined in the nephew; the retentive memory, the love of romance and poetry of the one, with the large reflective faculty and deep religious feeling of the other. From the father, a 'singularly robust and active man,' massively simple, yet not wanting in sagacity, through a line all sea-faring men since the Danish invasion, came the courage, hardihood, and, in part, the superstition of a Norse ancestry. The father was a giant, even among his brethren, and from him was transmitted that strength of physical organization which permitted in the son close mental application, at the same time with the most severe and exhausting bodily labour, throughout a period of fifteen years."

Hugh Miller's singular mental idiosyncrasy at the early age of *five* can easily be devined from the following extract from his autobiography. In alluding to the "apparitions of the buccaneer ancestor, and of the dissevered hand," he observes:—

"The fatal tempest, as it had prevailed chiefly on the eastern coasts of England and the south of Scotland, was represented in the north by but a few bleak, sullen days, in which, with little wind, a heavy ground-swell came rolling in coastwards from the east, and sent up its surf high against the precipices of the Northern Sutor. There were no forebodings in the master's dwelling; for his Peterhead letter—a brief but hopeful missive—had been just received; and my mother was sitting, on the evening after, beside the household fire, plying the cheerful needle, when the house-door, which had been left unfastened, fell open, and I was dispatched from her side to shut it. What follows must simply be regarded as the recollection, though a very vivid one, of a boy who had completed his fifth year only a month before. Day had not wholly disappeared, but it was fast posting on to night, and a gray haze spread a neutral tint of dimness over every more distant object, but left the nearer ones comparatively distinct, when I saw at the open door, within less than a yard of my breast, as plainly as I ever saw anything, a dissevered hand and arm stretched toward me. Hand and arm were apparently those of a female; they bore a livid and sodden appearance; and directly fronting me, where the body ought to have been, there was only blank, transparent space, through which I could see the dim forms of the objects beyond. I was fearfully startled, and ran shrieking to my mother, telling what I had seen; and the house-girl, whom she next sent to shut the door, apparently affected by my terror, also returned frightened, and said that she too had seen the woman's hand; which, however, did not seem to be the case. And finally, my mother going to the door, saw nothing, though she appeared much impressed by the extremeness of my terror and the minuteness of my description. I communicate the story as it lies fixed in my memory, without attempting to explain it. The supposed apparition may have been merely a momentary affection of the eye, of the nature described by Sir Walter Scott in his 'Demonology,' and Sir David Brewster in his 'Natural Magic.' But if so, the affection was one of which I experienced no after-return; and its coinci-

dence, in the case, with the probable time of my father's death, seems at least curious."

The American critic considers that

"There, no doubt, belongs to this apparition an important meaning, which its reference simply to a momentary affection of the eye does not suggest. It is well known how largely the supernatural element enters into the philosophy of a rude, and especially a sea-faring people. The legends of the mermaid of the Dropping Cave, and the water-wraith of the Conon, with the hints of witches, ghosts, and 'gude folk,' contained in the book, go to prove that the Cromarty villagers were no exception to the general statement. When we think of the lonely, half-orphan child, precocious in memory, and in the dawning of an imagination which was to become a distinguishing feature of the man, and at last, under the stimulus of deranged function, fatally to prevail over a strong instinct and a high moral sense, such a morbid embodiment of fancy will not excite our wonder. In the case of a child the phenomenon would most likely be of the nature of an illusion, and as such might, perhaps, have been easily explained. The night, the loneliness of the situation, the atmospheric conditions attending the tempest, and the roar of the waves as they smote against the cliffs, were sufficient exciting causes of the apparition. We shall see that the peculiar mental disposition grew with the advancing years of the lad.

"The subject of hallucinations is one that cannot attract too great attention, and within the past few years there has been much written upon it that is interesting and valuable. That visual hallucinations may occur under a normal condition of the perceptive and judging faculties, and hence are consistent with reason, is readily admitted. Not so, however, the proposition maintained by high authorities, that a large class of these phenomena are purely physiological. We must consider that all hallucinations in which the phantasy has an objectivity—and those instances of prolonged visual impressions of which we are conscious on closing the eyes, after gazing intently upon a bright object, have not this character—all true hallucinations are symptomatic of deranged function or of organic disease, and are truly pathological in their nature. The phantoms of the child, born with a diseased organization, or reared in an atmosphere of superstition—the dreams of the disturbed sleeper—the ecstatic creations of lovers, poets, and illuminati—the fearful impressions of mania and delirium—the embodyings of rage, fear, and remorse—incubi from a disordered viscus, and muscæ volitantes from simple retinal disturbance, are essentially morbid manifestations. Against this view, which seems necessary to the practical treatment of the subject, it is mainly urged that the hallucinations of certain great men are inseparably connected with the important moral and scientific truths which they have developed. But a minute and complete history of the man generally affords, as in the unhappy instance under notice, the clearest evidences of their morbid nature."

The mind of Hugh Miller exhibited early symptoms somewhat

allied to mental aberration. He says in his autobiography, when referring to the effects of the first few months of his apprenticeship upon his mental condition :—

“Though now seventeen, I was still seven inches short of my ultimate stature ; and my frame, cast more at the time in the mould of my mother than in that of the robust sailor, whose ‘back,’ according to the description of one of his comrades, ‘no one had ever put to the ground,’ was slim and loosely knit ; and I used to suffer much from wandering pains in the joints, and an oppressive feeling about the chest, as if crushed by some great weight. I became subject, too, to frequent fits of extreme depression of spirits, which took almost the form of a walking-sleep—results, I believe, of excessive fatigue—and during which my absence of mind was so extreme, that I lacked the ability of protecting myself against accident, in cases the most simple and ordinary. Besides other injuries, I lost at different times during the first few months of my apprenticeship, when in these fits of partial somnambulism, no fewer than seven of my finger-nails. But as I gathered strength my spirits became more equable ; and not until many years after, when my health failed for a time under over-exertion of another kind, had I any renewed experience of the fits of walking-sleep.”

Symptoms of severe bodily fatigue, associated with extreme depression of spirits, mental exhaustion, reverie, paroxysms of melancholy, partial somnambulism, to say nothing of the hallucinations manifesting themselves at so early a period of life, should have been viewed as important *psychical deviations from health requiring the most careful and cautious moral and intellectual training, medical and hygienic treatment*. As he advanced in his apprenticeship he became “desponding, apprehensive of an early death, and his gloomy temperament, with the superstition of his nature and education, laid powerful hold of his mind.”

Hugh Miller says in his autobiography :—

“One day, when on the top of a tall building, part of which we were throwing down to supply us with materials for our work, I raised up a broad slab of red micaceous sandstone, thin as a roofing slate, and exceedingly fragile, and, holding it out at arm’s length, dropped it over the wall. I had been worse than usual all that morning, and much depressed ; and, ere the slab parted from my hand, I said—looking forward to but a few months of life—I shall break up like that sandstone slab, and perish as little known. But the sandstone slab did not break up ; a sudden breeze blew it aslant as it fell ; it cleared the rough heap of stones below, where I had anticipated it would have been shivered to fragments ; and, lighting on its edge, stuck upright, like a miniature obelisk, in the soft greensward beyond. None of the philosophies or the logics would have sanctioned the inference which I immediately drew ; but that curious chapter in the history of human belief which treats of signs and omens abounds in such postulates and

such conclusions. I at once inferred that recovery awaited me; I was 'to live and not die,' and felt lighter, during the few weeks I afterwards toiled at this place, under the cheering influence of the conviction."

We cannot resist quoting an important passage *in extenso* having reference to the psychological bearings of the case of Hugh Miller:—

"Most efficient in producing morbid mental phenomena, next to bodily disorder engendered by reckless inattention to the organic functions, is the exercise of abstract thought; of which an old writer says, that it 'dries the brain and extinguishes natural heat.' For the latter half of the second period of Hugh Miller's education, when his bodily health had become robust, and when his mental labour was little more than the reproduction of his reading and observation, we have no account of hallucinations. When, however, the character of his writings passes from that of descriptive and legendary tales to the generalizations of his later geological works, we find a continually enlarging development in the direction of his peculiar infirmity. That the abstraction of genius, so prolific of the grandest truths, should have so much in common with the reverie of mental exhaustion and depravation, is a curious and humiliating fact.

"Having thus far referred, in these remarks suggested by the suicide of Hugh Miller, to what will probably be thought its true explanation, in the peculiar mental constitution and early history of that great man, we have nearly done. The growing manifestations of mental disturbance which followed the total neglect of regimen, exercise, and sleep, and his unintermitting abstraction and deep thought, were such as characterized his former experience. They took the form of suspicions and apprehensions, which, at first connected with enemies from without, and with hallucinations of the senses, grew rapidly more intense as the inducing causes were continued, until they came in paroxysms of maniacal terror with the vague and dreadful visions of nightmare. There were also the somnambulism and the sense of extreme exhaustion which attended the attacks of his youth. But we will not dwell upon the particulars of the fatal termination. With these our readers are already acquainted. The immediate history of the event, connected with one of so clear an intellect, so conservative religious belief, and such unstained character, has been studied with a mournful and rational interest. If such an one be not safe from a calamity so terrible, how great reason to fear have those of a feeblener intellect, of stronger passions, of vacillating belief, and unfortunate lives! It is in behalf of this interest that we have traced, beyond the facts which give rise to these suggestions, the causes of the suicide in the mental organization of the man. Let us proceed from this view to notice particularly the character of the act.

"Psychological science at the present day, returning from the material tendency which it had acquired through the German philosophies, refers largely to moral causes in its interpretation of suicide. In no other way can its history, as presented under the civilizations

before the Christian era, and since among the Asiatic communities, be made consistent with its evident present relations to science and religion. Nothing can be clearer than that the great mass of suicides noticed in ancient history were connected with the philosophies and false religion of their time; and it can hardly be doubted, that as these had their birth in a moral darkness, so, to a fearful extent, do those of our own age have their source in a moral depravation.

"Yet, the common sense of mankind in all ages has recognised the suicide of disease, and has made the divisions of the suicide of sanity and the suicide of insanity. In the light of modern science we may view the former as rational, and as passionate; the latter as the determined, and the impulsive. The ancient civilizations afford us numerous instances of the rational suicide. Viewed in the imperfect moral light of their age, some of these illustrate the noblest virtues of the human character. This class can scarcely be admitted where the Christian religion, even in its most corrupted forms, has extended. Its inspired teachings have created a moral sense averse to self-murder, as universal as the instinct of self-preservation, and as powerful as that which forbids homicide. A depraved morality is now, without question, the most prolific source of suicide in the civilized world. Ours is the age of the passions, and the question of suicide of this class has become of alarming magnitude and importance. But this is the province of the moralist and the divine.

"What we have called the determined suicide of the insane is connected with chronic mental disease, usually lypemania, and the disposition to it is a symptom which claims for its unfortunate subject the most special and discriminating treatment. Some rare and not well-understood cases have led to the admission of a suicidal monomania. But it is in maniacal suicide, and its connexion with functional derangement and structural disease, that we find matter of especial interest and importance. It is of the deepest interest, because the subjects of the fatal disposition are so often those whose genius and virtues claim the admiration and homage of their fellow-men,—of the first importance, because the errors that induce the transient insanity which belongs to it tend, in a thousand other directions, to death, and because it seems so possible in a great degree to effect their prevention.

"There has been no hesitation, on the part of the public, as to the nature of the act by which Hugh Miller has been lost to the world. That it was done under the most overpowering and terrible maniacal delusions, perhaps no one has doubted. A general knowledge of the man and the circumstances of the fatality have sufficed already for this conclusion. What we have found in the history of an early-developed idiosyncrasy and its prominence through a long period, in his education, in his changed mental and bodily habits, and in the symptoms which preceded the final paroxysm, may perhaps serve to strengthen the grounds of that judgment. We shall at least be satisfied from the fact that any inquiry into such a subject must aid to enforce the important moral with which it is charged. Here was one in whom no morbid cravings for the unknowable swayed a humble belief in the

sufficiency of revealed truth to meet the moral wants of our race, while his noble intellect permitted the largest conceptions of Deity in his works as Creator and Governor of the universe. And still, one who, while extending the science of the world's creation thousands of years into the past, and rearing it in bulwarks about the infinitely important domain of his religious belief, yet left unstudied the immediate and underlying truths of his own mental organization, and that complex and delicate machinery, through which the spiritual essence must elaborate all that we can know of life, to derangement and a terrible dissolution."

So much for the unhappy suicide of this valuable and gifted member of society. But is this an isolated case? In looking back upon the past few years can we not recall to mind many similar and sad illustrations of suicide, clearly consequent upon a non-recognition of the important fact that, *in every case of departure from a normal or healthy action of the mental and moral powers, the brain is in a physical state of derangement*—that disturbed thoughts, depression of spirits, delusive ideas, hallucination of the senses, alienation of affection, exaggerated fears and apprehensions, morbid impulses, *have the same relation to the brain that disordered respiration has to the lungs*—and that it is as impossible for the faculties of the mind to be disordered or deranged independently of the brain, *as for the respiration to be affected apart altogether from a change in the material condition of the lungs and heart?* It is well observed by an able writer experienced in the treatment of insanity (the late Dr. Mann Burrows):—

"Did mental derangement experience the same prompt attention as most other complaints, it is impossible to judge how much more favourable the results might prove: the reverse almost always obtains; and therefore insanity more frequently degenerates into a chronic and continuous type before remedies are applied. All practitioners have remarked how difficult it is of cure where it has taken the latter form comparatively with acute or recent cases. In this disposition it but assimilates to other diseases. For be the disease what it may, whenever remedies are neglected after its first access there is great danger of its assuming an obstinate, if not a permanent character. Unfortunately the approach of insanity, though generally perceptible to strangers, is rarely remarked by relatives. We are all apt to shun that which is painful or displeasing; so the insidious approaches of mental derangement are rather construed into nervous irritability, or eccentricity, or anything rather than the truth, and are suffered to proceed till some terrible exacerbation of delirious fury or despondency ensues. A malady is thus often confirmed in one whom we most value, and whose intellects very probably might have been preserved had timely aid been administered. How frequently do we witness the bitterness of self-accusation, and the unceasing regrets of the near

connexions of lunatics, because they have persevered in their wilful blindness till the calamity they deprecated has occurred! Assuredly the approach of intellectual disorders sometimes escapes the most intelligent observer; while bodily ailments, from the derangement of some ordinary function or from acknowledged pain, are at once visible."

We have, with a view of establishing beyond the possibility of doubt the important fact, that an enormous sacrifice of valuable human life annually takes place in this and other countries owing to culpable and inexcusable negligence and ignorance, collected from the usual channels of daily intelligence a number of cases of suicide, in *all of which there existed before the act of self-destruction well-marked symptoms of physical ill-health and disorder of the brain and nervous system*. In every one of these cases, no suspicion appears to have been entertained as to the *mental health* of the unhappy suicide until life was extinct! Had the *lungs, heart, liver, stomach, or skin* exhibited equivalent symptoms of a departure from health; would not medical aid have been, without scruple or loss of time, obtained? Alas for the poor brain! Its functions, its psychical or mental manifestations, may be palpably deranged, and yet awaken no apprehension on the part of those immediately in association with the invalid. This subject is of such vast importance when viewed in connexion with the SAFETY OF HUMAN LIFE, that we do not hesitate in placing before our readers, even at the risk of repeating a thrice-told tale, a body of valuable evidence clearly and conclusively illustrative of the fatal consequences resulting from the neglect of *positive, well-marked, and obvious symptoms of brain and mind disorder*. We deliberately and unhesitatingly assert, having had no inconsiderable experience in the treatment of mental derangement associated with a tendency to suicide, that nearly all these fatal instances of self-destruction might have been averted if the patient had been brought within the reach of remedial measures; in other words, *if the abnormal or unhealthy state of the brain, as indicated by a disturbed state of the thoughts, mental depression, &c., had been fully recognised and properly treated by medical and moral agents*. How difficult, however, it is to persuade those ignorant of the physiology and pathology of the brain and mind, of the necessity and importance of attending, without delay, to the earliest scintillations of brain mischief and disorder! It is at this period when so much may be effected for the relief and probably for the positive cure of the patient. But we proceed without further comment to the publication of some sad illustrations of neglected brain disease leading to suicide and death. These facts will, we trust, speak trumpet-tongued to all interested in the treatment of dis-

eases of the brain and in the important subject of the preservation of human life.*

Colonel C—— B——, aged 55 years, of the East India Company's service, committed suicide by cutting his left arm with a razor. One morning deceased rang the bell, and on the housemaid answering it, he requested her to take a note to Colonel P——. She returned in about twenty minutes; she asked the ladies where the colonel was. They told her he was in the parlour. On going there she could not find him; she then went to the back drawing-room, and knocked at the door, but received no answer. Colonel P—— arrived, and having made known her suspicions to him, he had a ladder brought and entered at the window. Opened the door for witness. Upon entering she found her master sitting in his chair covered with blood. Two pistols were on the floor, and a razor covered with blood was on the chair at his side. His left arm was cut, and he seemed quite dead. *Deceased had been very low-spirited for two or three days.* Colonel P—— said *deceased had been greatly depressed lately.* He received a letter from him the day before his death, in which he said, "*I don't think I shall ever know happiness again.*" Believed his depression arose from his being separated from his wife.—Verdict—Temporary insanity.

C—— H——, 41 years of age, steward of a steam-packet, destroyed himself under the following circumstances. The deceased had been in the steam-packet service for ten years, and returned home from his voyage in a *very depressed and melancholy state*, but appeared to recover towards night. The following morning the deceased showed no inclination to get up, and his wife urged him to do so, and occupy himself with his duties on board, by which means she thought he might recover from his depression of mind. He told her in a very melancholy tone he could not do so, and gave her directions to forward some things which she had prepared for the passengers' use by one of the neighbours, with a message to the captain that he had become insane. Finding all her persuasion useless, she did as she was directed; but had scarcely entered the sitting-room, when she was horrified at seeing her husband come out of the bed-room with a clasp-knife in his hand, and the blood flowing profusely from his throat, which was cut across to a depth of several inches; and, after articulating with difficulty, "Well, old girl, I have done it perfectly now," he staggered forward a few feet and fell upon the sofa. After lingering a few hours, during which he was speechless, he expired. He had always treated his wife and two children with the greatest affection; *but he had for a long time past so repeatedly expressed his intention to destroy himself, and exhibited such confirmed melancholy and thoughtfulness, frequently sitting for*

*Cases of suicide occasionally occur without any apparent precursory symptom of actual brain or mental disease, but these cases are exceptional only. The subjoined is one in point. Mr. George Allen, clerk in a store in New Philadelphia, Ohio, recently committed suicide. He was a young man of good habits, moral, honest, much respected, and bid fair to become a useful member of society. The subjoined account of his conduct exhibits a sad instance of the mental and moral perversion and infidel apathy now but too current. "The day before he committed this rash act, he appeared to be in good spirits, called on some of his friends and told them he intended to go home, paid all the debts he owed, returned the books he borrowed, and all the time talked and laughed with his accustomed gaiety. In the evening previous to his death he wrote several letters, and composed the epitaph he wanted on his tombstone. He attended to the customers in the store, and no one could judge from his conduct the silent determination within. In the course of conversation with some young gentlemen, one of them asked 'What is life?' Deceased good-humouredly replied, 'he intended shortly to solve that problem.' It was evidently his intention to put an end to his existence by taking chloroform. He purchased a bottle of it; made his bed on the counter, lay down, took an overdose, but it had not the fatal effect. He then got a ladder and rope, and hung himself in the loft of the new building adjoining the store. His toes touched the floor; his hands were untied; he swung aside of the ladder, so that he probably could have saved himself even after he had taken the fatal leap."—*From a recent American Paper.*

hours in fits of abstraction without uttering a word, that she had been obliged upon several occasions to walk about the streets all night for fear that he might murder her. It appears that his mother had about two years previously unexpectedly destroyed herself in a shocking manner. This made a deep impression upon the mind of the deceased, and induced a morbid feeling, which caused him to think that two other persons in the company's service were endeavouring to procure his discharge for their own advantage (delusion). There was no foundation for this impression.—Verdict—Temporary insanity.

P— (an old soldier) had been remarkable for his happy and kindly disposition. Three weeks previously to his death his niece observed that he was *unusually depressed in spirits*, which so increased, that on Sunday se'nnight Mr. J— P—, surgeon, was summoned to attend him. That gentleman found him suffering from great determination of blood to the head. A few mornings afterwards he rose about seven o'clock, and went out of the house, and in less than half an hour he was found in the hayloft, his head being held by a cord tied to a beam five feet from the ground, and his body in a reclining posture. Death had not, however, resulted from hanging; deceased's hands were bloody; and it would seem that finding his attempts at self-destruction in that way were not effectual, he inflicted so deep a wound in the throat with some sharp instrument as to sever the windpipe and all the large bloodvessels of the throat. The servant girl, to whom he spoke on the way out, seems to have had no suspicion of his intention.—Verdict—Temporary insanity.

Mr. R— R— K— committed self-destruction by cutting his throat. It appeared upon inquiry that the deceased had for some time past been labouring under delusions that some persons owed him a large sum of money; and recently, on getting ready to go to church, he suddenly turned round and asked those who were standing near to him, "What, do you mean to assassinate?" *He was constantly entreating his friends that he should not be sent to a lunatic asylum, although nothing was ever said to him on the subject.** On the Thursday night he was out with his aunt, and they returned home together. *In consequence of his low spirits, his aunt had sat up for some nights with him until he was asleep; but on the Thursday night, at his urgent request not to leave him, for fear, as he said, that some one would take him away, she remained with him all night, until eight o'clock in the morning.* She then left the room for a few minutes, and on her return she found that he had taken advantage of her temporary absence, having in that short interval cut his throat with a razor. All the vessels of the neck were divided. He was a very steady young man; and although his friends had often tried to find out the cause of his melancholy, they had never been able to do so.—Verdict—Temporary insanity.

J— N— committed suicide by drowning himself in a stream near Windsor. The deceased was 28 years of age, and had gone about his work as usual on the morning of the day above mentioned, and when he left home proceeded in the direction of Virginia Water. At noon he was observed by one of the park-keepers to throw himself off the high bridge near the Blacknest entrance to the Royal property. Deceased had written on the wall, "Good-bye all. J. N." No cause could be assigned for the rash act; *but the melancholy annals of the deceased's family show a remarkable and almost unaccountable predisposition to self-destruction on the part of its members.* About twelve years ago a brother of the deceased threw himself from off the same bridge, and was drowned. Twelve months previous to the death of the deceased, a cousin drowned himself in the same water; many years ago an uncle hung himself in an adjoining wood; and about seven years ago another cousin hung himself in a plantation on the Silwood estate, close by.—Verdict—Insanity.

A— B—, aged 17, committed suicide by drowning. *She had been in low spirits for some weeks. She was labouring under a nervous complaint.* On Sunday evening, the 28th, she went to bed at seven o'clock. One of the witnesses found her sitting up in bed and holding her forehead in her hand. *She said she had a*

* How often does this consciousness of insanity exist! the unhappy patient fully recognising the importance of being placed under restraint.

very bad headache. She did not sleep the whole of the night, and behaved in a very strange way. The next day, the 29th, between twelve and one o'clock, she attempted to get up, and the witness persuaded her to return to bed, which she did, and remained till five o'clock, when she got up, complaining of a pain in her bowels, and said she must go out. She complained of the cold, and put on all her clothes, and went away, saying she should not be gone long; she did not, however, return, and witness did not see her alive afterwards. Search was made after her, but she was nowhere to be found. Witness could not account for her lowness of spirits, and thought it was partly constitutional. She was always weak and delicate.

Another witness spoke as to seeing her come from her home about twenty minutes before six in the morning, over a bank, and go down the road leading to the pond in which her body was found.

Another witness, the widow of a deceased uncle, stated that in the beginning of April last deceased and herself were passing a pond called "Little Burnett's pond," when deceased said, "Look here, Hannah; this would be a good place for some one to jump in, and some of these days I shall come and jump in." Witness told her not to have any such thoughts. Deceased had several times complained to her of her head. On the Sunday deceased told her her head did not ache, but felt muddled. The brother of the deceased deposed to pulling the body out of the water with a hay-rake; she was quite dead.—Verdict—Temporary insanity.

On the 7th of June, 1854, an inquest was held on the body of H— P—, who committed suicide by drowning herself on the 5th of June, at Chipping Sudbury, Gloucestershire, in a pool of water. It appeared that the deceased was last seen alive on the evening of the 5th instant, about ten o'clock, and nothing was heard of her until the following morning, when she was found lying in the above pool. She appeared, when taken out of the water, to have been dead several hours. *Her conduct had of late been strange and eccentric.*—Verdict—Temporary insanity.

Sir J— M— committed suicide by shooting himself with a pistol. It appeared that the deceased gentleman's bodily health had of late been tolerably good, *but that his spirits had for some time past been very much depressed.* On Sunday, the 17th, he appeared somewhat better, and retired to rest between eleven and twelve o'clock. Shortly before five o'clock the following morning his valet was awakened by a deadened report of fire-arms, and upon going to his master's chamber he discovered him lying prostrate on the carpet, weltering in his blood, and lifeless; his head was shattered to atoms, and a small double-barrelled holster pistol, which had recently been discharged, was lying close to his right hand.

G— S— D—, aged 35, committed suicide by discharging a pistol through his head, under the following determined circumstances.

Mr. H. Prendergast, the barrister, said that he had known the deceased many years, and that he was for some years at M— and G—, employed by the Government as civil engineer, which profession he had relinquished about twelve months since. In September witness had a communication with deceased and his family with reference to his pecuniary affairs, as he was in a state of considerable embarrassment. He had raised some money on a reversionary interest which was nearly expended. These difficulties had *weighed upon his mind, and he had lately been labouring under great despondency.*—Verdict—Temporary insanity.

F— J— B—, a very respectable tradesman, 40 years of age, committed suicide by shooting himself through the head. His two sons, his only children, had emigrated to America. From the period of their departure *his mind became very depressed, so much so as to excite the apprehension of his friends.* One morning he arose at his usual hour and went about his business, giving directions to his workmen. Between nine and ten o'clock, not having come to his breakfast, search was made for him, when it was discovered that one of the upper workshops was fastened, and being forced open, the body of Mr. B— was found lying upon the floor quite dead—the greater portion of his skull and brains being blown about the room, and the gun lying with the barrel on a vice, and some string fastened to the left hand of the deceased.

Mr. W—L—M—L— shot himself with a pistol. He had been at least a whole year in a very desponding state, which arose from his thinking he had lost all his property. *He had some months previously attempted to commit suicide; he was sane on every point except money matters.* The brother of the deceased said that the deceased had been suffering mentally for more than twelve months. The disorder commenced some time after a mill (that formed a principal part of his business) was destroyed by fire, and he had an erroneous impression that he was in consequence going to ruin. He had dined at witness's house the previous day, but he tried to avoid any other company. *"My impression is that his mind was decidedly wrong."* I was never informed of what took place in March last until some considerable time afterwards as to his having attempted suicide, when he told me himself, and extracted from me a promise that I would never mention it to any other person." A paragraph from a letter to the witness from the deceased was read by the coroner, as follows:—"I have written this letter with great difficulty, as you may suppose, when I have the awful scene before me. Your affectionate brother, &c." The coroner said that the deceased alluded in the letter to the circumstance that he was watched. The witness said that he was obliged to be looked after, and that his candid opinion was that the business was too great for him to carry on. His affairs were not in the least deranged, but he fancied that the figures were conjured up to deceive him.—Verdict—Temporary insanity.

J—C—S—, ale-merchant, committed suicide by shooting himself through the head with a gun. The deceased was 38 years of age, and the cause of this distressing case of self-destruction is said to have been domestic affliction of a most painful nature, affecting his domestic peace.

It appeared from the evidence that the deceased gentleman *was under such heavy depression of spirits as to cause the greatest uneasiness to his friends and relatives, from the cause above stated.* He had been for some time on a visit with his family, and on Tuesday, rather unexpectedly, returned to N—B—, when he complained of feeling very low. About five o'clock in the evening he went into the brewery, and had some conversation on business with his brewer, Henry Shaw, after which he went upstairs into his office, and a few minutes afterwards a report of fire-arms was heard. Shaw immediately hastened to the office, and to his great horror found his master sitting in a chair quite dead; the discharged gun, which he had placed to his head, resting against a brick arch, and a small poker which he had applied to the trigger lying across his lap. The face and head were fearfully mutilated, and not a sign of life remained.—Verdict—Temporary insanity.

W—W—, aged 33 years, committed suicide by hanging himself in his cell. The deceased had been tried at the sessions previous on two charges, of stealing an order for 1400*l.*, and a piece of paper of the value of one penny, and was sentenced at the following May sessions of the Central Criminal Court. Judgment having been respited upon a point of law, he was brought up for judgment at the July sessions, and sentenced to be transported for ten years.

Dr. McMurdo, the surgeon of the prison, stated that when the deceased was committed he was bordering on a state of *delirium tremens*. *He had been a great drinker. He was continually complaining of headache, and was very excitable.*—Verdict—Temporary insanity.

J—S— committed suicide by hanging himself. He went into the cow-house about half-past twelve to clean it out, and was discovered hanging from a beam by a rope. When cut down he was found quite dead. *He had complained lately of suffering in his head.*

A witness deposed that deceased had been in a very desponding state of late. He complained of a pain in his head, and of the times being so bad.

The surgeon stated that the deceased since November last was suffering under great prostration of strength and want of sleep, and complained of disturbing thoughts when he was awake, crying like a child, and in very low spirits.—Verdict—Temporary insanity.

Miss M—F—, aged 35, a singer and teacher of music, committed suicide by hanging herself by a cord fastened to the rails of the stairs. *She had been in a desponding state for three months,* the origin of which was attributed to a supposed disappointment in marriage; but it appeared from the evidence that the gentleman

was no more than a spectre bridegroom. Her father was at the time in a lunatic asylum.

Hannah Gothart, of Claypit-lane, and who lived next door to Mrs. F——, said, “My child came into the house on Monday afternoon at four o’clock, and said that Mrs. F—— was in a fit. I heard her screaming at the same time. I went to the house, and Mrs. F—— cried out, ‘Oh, my daughter is hung up!’ Two neighbours came in and went upstairs. I went with them, and saw the deceased suspended by a cord fastened to the rails of the stairs. One of the men lifted the body in his arms, and I cut the rope. She was quite dead. It was about four o’clock in the afternoon.”

M—— S—— stated as follows:—“Mrs. F—— is cousin to me by marriage. Her husband is not dead. He was a very bad man, and they left him and came to Leeds twenty years ago. I believe he was in a lunatic asylum. I have seen Miss F—— every week for three months, and *thought her very low*. She told me something about a disappointment. She asked me some time since to prepare the wedding breakfast, as she was going to be married, and I did so. It was in June last. The breakfast was prepared, and Miss F—— and her bridesmaid were dressed by eight o’clock in the morning, but no man came. I tried to cheer her up, and asked her to write to the young man, as he might be ill. She said no, they had had no notes, and she would not write. She said he was to bring the carriage with him. She did not mention his name. She said he lived at Headingley. *She was very much distressed, cried bitterly, and was obliged to go to bed. The mother too was very much distressed. She had been deluded, I believe. A number of dresses had been ordered, and came up to the house. The young man was never seen at the house. She owned that he had never been at the house, but she had seen him at concerts or some of those places. She was a singer or teacher of music, and she met him, I understand, at some musical society. I have thought her not quite right for three months. I saw her on Sunday last; she was very low then, and said she could not find courage to go out. She said that some one had met her, and told her she had made a sad mess of herself. She was sadly cast down, and appeared to labour under a delirium. Wine, bridecake, elegant dresses, and other things were prepared. I have no doubt she has not been right in her mind for a long time.*”

Mrs. Lockwood, another witness, deposed that she had known the deceased fourteen or fifteen years. “For the last three months I don’t think she has been altogether right. She had told me she had a disappointment in marriage; that she had taken a house in Chapeltown. I asked her if she had seen it, and she replied in the negative. I asked her who the gentleman was, and she said I should know soon enough; that there had not been any letters; that he had not been at her house; and that it had all arisen from spirits and flowers. I asked her what she meant, and she replied that I could not understand, and got into a rage. I met her on Saturday last. She said she could not get over this great disappointment. I told her I thought it was a delusion, and advised her to think less of it. She began to talk very wildly; twisted her thumb nearly round; and when I asked after her appetite she became very much enraged. *I am satisfied she was out of her mind, and on Saturday afternoon she looked very wild indeed.*”
—Verdict—Temporary insanity.

W—— C——, aged 40 years, was found dead, and hanging inside a hollow tree, in Hyde Park. In his pocket a paper was found, with the following written in pencil:—“I die a victim, and not a self-murderer;” and “W—— W——, P——, near Botley, Southampton.” A letter was received from Mr. W——, to the effect that a man of the deceased’s description had been his clerk, but had *left his situation, wandering no one knew where, and that everybody who knew him was not surprised at what he had done*, he latterly having been thought of insane mind.
—Verdict—Temporary insanity.

J—— S——, a weaver, aged 68 years, committed suicide by hanging himself during the temporary absence of his wife. Upon the inquest the following evidence was given:—

J—— S——, the wife of the deceased, stated that her husband worked at his trade as a weaver in the Oracle nearly all his life. *Latterly he had not much to do, and was greatly depressed in spirits.* He had until lately enjoyed very good

health, and was not attended by any medical man. Yesterday morning he went out about nine o'clock, without taking his breakfast or speaking to me, which was very unusual. He came in just before twelve, and I asked him where he had been. He replied, 'I have been wandering about, but have not been into anybody's house.' He complained of being cold and of his head aching, and said he was afraid he should lose his senses. We then had a bit of dinner, and he still complained of his head. At a little before four o'clock we took tea; he read a little, but again said his head was bad. We went to bed about nine o'clock; he was very restless during the night, got up several times, and complained of a pain in his head. I got up just after seven o'clock, leaving him in bed, and went down stairs to prepare the breakfast. I took him up a cup of tea and some toast, and I observed that his hand trembled very much. I left him in bed and went out about nine o'clock to Mr. Brown's, in Friar-street, to pay my rent; and I said to my husband before I went out that I would lock the door, and he was to lie until I returned. He said, 'Ah, do.' I then went away, and returned just before ten o'clock, unlocked the door, and went up stairs. I spoke to him, but received no answer. I looked up, and saw he was hanging to the bedstead by a little bit of cord. I took a knife out of my pocket, cut the cord, and he fell on the floor. I then went down stairs, and ran over the way to one of the neighbours and gave the alarm, and on my return found he was dead. He was a good man, and a good husband, and we had no previous quarrel. He had been in this low desponding way for eight or nine months, but worse lately. He used to say, when the Oracle was lost his family would starve. He had often expressed himself to the effect that he should go out of his mind; but he would not allow me to go for any medical man, as he said it was his mind."—Verdict—Temporary insanity.

A medical gentleman, Mr. J—— S——, aged 42 years, committed suicide by hanging himself. It appeared from the evidence on the inquest that the deceased had taken apartments at the hotel of a Mrs. Carroll, the Ivy tavern, Bridge-place, Harrow-road, and desired to be called at six o'clock in the morning, in order that he might return by train to Bath. As he did not answer, although the servant man repeatedly called at his door, it was forced open, and he was found suspended by his handkerchief from the bed-post and quite dead. Mr. John Hunter, a friend of the deceased, said that the deceased arrived in London a fortnight since in a very desponding state, frequently exclaiming, "My brain is burning, my brain is softening; I fear my wife and child will be reduced to poverty." Although he thus feared for his family, he was worth 1300*l*. He always expressed a conviction that the softening of his brain would kill him, yet he would not see any medical man. In his portmanteau the following letter to his wife was found:—"I have missed the train again. Oh, God! I know not what to do, what to come home for. My brain is burning and getting softer every day, and I have no senses left. I have often prayed to God to give me my intellects. Oh, what will become of my wife and child! I have no friends left."—Verdict—Insanity.

An inquest was held at Chatham on the body of J—— B——, aged 40, who destroyed herself by hanging.

The surgeon stated that he had been in the habit of attending the deceased for the last year and a half. He saw her on Thursday while she was out walking, when he observed her to be walking very slowly, and appearing to be very much depressed in spirits and very desponding. Witness on that occasion put some questions to her, but she replied that she did not feel ill, but uncomfortable in her mind, and very anxious. She at first said there was no cause for her depression, but she could not shake it off; that the family in the house had noticed the same thing, and had spoken to her about it.—Verdict—Temporary insanity.

J—— W—— B—— committed suicide by hanging himself. At the inquest the widow of the deceased deposed that he was her husband, to whom she had been married about three years. That he usually slept very little at night, and she had wished him to obtain medical assistance, but he replied that a doctor could do him no good, as he had no pain, and he hoped he should soon be better. He looked vacant at times, and occasionally very wild. On Monday afternoon last he went into the dining-room, where witness and her daughter were sitting. He looked at them, but did not say anything. His face was very red, and he appeared very

much excited. She inquired of him what was the matter, and endeavoured to persuade him to tell her what troubled him; after some hesitation he said that everything went wrong, and there seemed to be a blight upon everything he did. He had recently been much troubled about his machinery, which had cost him much more money than he had expected. On the previous morning he appeared very restless, and kept going in and out of the rooms, apparently much disturbed, and witness felt certain he was not in his proper mind at the time he hanged himself, and that he had not been so at intervals for several days.—Verdict—Temporary insanity.

N—M— committed suicide by suspending himself by a rope. The deceased had lived in the service of Mr. Turner for the very long period of nearly forty years, during the whole of which time he had been considered a man of strict integrity. Recently his employer had been robbed of a large quantity of rags, and as it was the duty of the deceased to take care of his master's property, the loss appears to have affected his spirits, so as to render it necessary to watch him. On Monday morning, about six o'clock, his son found him in a secret place in great distress of mind, and he solicited his son to hang him out of the way. After endeavouring to console him, and telling him to banish such thoughts from his mind, his son went about his business. About two o'clock in the afternoon he was missed from home, and on searching his son found him as before described. At the inquest it appeared that the deceased had been in a desponding state for some time past.—Verdict—Temporary insanity.

J—H—P— committed suicide by hanging himself in his bed-room. At the inquest holden it appeared from the evidence that the deceased had been in a desponding state for a considerable time; that he was occasionally insane; and that insanity was hereditary in his family. This having been satisfactorily proved, the jury returned a verdict of temporary insanity.

S—P— aged 60 years, committed suicide. It appeared from the evidence that the deceased had been in a desponding state for some time. The surgeon deposed as follows:—She had at times been very excited, sometimes very depressed, low-spirited, and dejected, and always fretting about something or other. Sometimes she would say she had no clothes to wear, at other times that her children were starving. This had been the case for the last six weeks or two months. I have had three different persons at times to look after her, but they had all gone away, the last one on Saturday last, ill; she had been worse lately, but on Sunday seemed more rational. She was very much excited yesterday (Monday) and irritable, but better at night. Early this morning she was restless and could not sleep, but there was nothing particular in her manner; sometimes she knew what she was about, and sometimes she seemed lost. She dreaded having a stranger to wait upon her.

Another surgeon stated that he had known the deceased, and had personally attended her four or five years or more; that he had attended her once or twice a year when her liver or stomach was out of order. She used to be low at times, and at other times irritable and excited. "I saw her within this fortnight, and found her in a very excited state, and talking in an incoherent way; she looked very vacant. I talked to her sometimes, and left her more tranquil. I considered she was suffering from nervous irritability; she has usually when I have seen her been low and silent, but the last time she was irritable and excited, and said she would not have any one with her. She was worse then than I had ever seen her before. I saw her this morning; she was quite dead. I found the mark of a cord round her neck, no doubt produced by the cord fastened to the bedpost. No doubt her death was caused by strangulation, by the pressure of the cord on the windpipe."—Verdict—That the deceased destroyed herself while in an unsound state of mind.

W—J— committed suicide by tying a cravat tightly round his throat, and used part of a two-foot rule to make it tighter, so as to produce strangulation. It appeared that deceased was in a very destitute condition, and complained much of a pain in his head. He was a married man, but his wife had left him. It also

further appeared that his father committed suicide by hanging himself, and in the same parish.—Verdict—Temporary insanity.

A person named A—— committed suicide by throwing himself on a railway, the train running over him. The deceased was between 40 and 50 years of age, and, in consequence of reverses in business, had become somewhat reduced. The latter event appeared to have preyed on his mind, so as to impair his intellect. His friends, anxious that he might be properly taken care of, placed him under proper surveillance in the union poor-house. His conduct in the house was such that no one ever anticipated he contemplated laying violent hands upon himself. On Good Friday evening he took a little walking exercise to improve his health, and an attendant was sent out with him to show him round the neighbouring fields, and in doing so came near the railway just as the down express train came in sight. On hearing the noise of the train he darted from his attendant, and ran upon the line before the engine had come up. His keeper called loudly to him to keep back, but instead of doing so, he went forward to meet the train, and before the momentum of the engine and carriages could be arrested, they came almost at full speed upon the man, who held his head down so low as almost to touch the buffer of the locomotive. He was instantly hurled across the rails, when the wheels of the engine and all the carriages passed over him and killed him on the spot.—Verdict—Temporary insanity.

W—— H——, aged 44 years, committed suicide by throwing himself from a window in the following singular manner, by which he received a hurt on the scalp, and other injuries, which terminated in inflammation of the lungs. It appeared that deceased believed he was entitled to some property which was mortgaged, and he was frequently in a state of great excitement from fancying that he was deprived of its possession. On Saturday night he was in the kitchen of the house where he resided, when he was under the impression that he had seen a ghost the previous day, and asked for a cleaver, with which he said he intended to cut it to pieces should it come. He then observed that the room was on fire, and that he saw the smoke coming through the floor. A female, with whom he lived, endeavoured to persuade him to the contrary, but he became so outrageous that she left him, and remained in the area all night. The next forenoon he suddenly rushed out of the house, crying "murder," and "thieves." He ran up Crown-street, and entered the house No. 2, and passing by a female, the occupier of the shop, ran upstairs, forced open the door of the second floor, into which he went, flinging down a lad in the room. He then went to the window, which was open, and from which he dropped into the street. He was conveyed thence to Charing Cross Hospital, where he died.—Verdict—Temporary insanity.

J—— I—— committed suicide at the Rainbow-hill tunnel, on the Oxford, Worcester, and Wolverhampton Railway. At the inquest the following facts were elicited. The deceased, it appeared, had for some time been in a very desponding state of mind, and on Wednesday went out to be shaved. He was seen in the course of the day by the side of the railway, near the Rainbow-hill tunnel. He was watching the approaching train from Birmingham; and just as it came up, he suddenly laid himself down upon the rails immediately before it, deliberately placing his neck across one of the rails. In another moment, before the driver who saw the act could stop the train, it passed over him, completely severing his head from his body, and carrying it to some distance, while the trunk was terribly lacerated and torn.—Verdict—Temporary insanity.

J—— A—— D—— committed suicide under the following circumstances:—Deceased was 39 years of age, was a civil engineer by profession, and formerly a pupil of Mr. V——. Latterly he became subject to great excitability, and for the benefit of his health had been staying with Mr. R——, of T——. He expressed to this person a great horror of self-destruction, and begged him to take charge of two razors for him. He continued, however, to get worse, and had a strong propensity to throw himself out of window, which he eventually did.—Verdict—Temporary insanity.

W—— H——, 34 years of age, was charged with having stolen a bill, valued at 7l. The prisoner, who had a wild, unsettled expression about the eyes, pleaded

guilty, and while in gaol he made an attempt to cut his throat with a razor. It had been the practice of allowing the untried prisoners to shave themselves, and while performing this operation the prisoner drew the razor he was using across his throat. A turnkey, who was fortunately standing near him, instantly seized his arm, and prevented him from completing his suicidal intention. He had already been an inmate of a lunatic asylum.

A—F—, aged 42 years, the wife of a labourer, attempted to commit suicide by cutting her throat. It appeared that for more than twelve months she had suffered from a disordered intellect, and it is supposed than an intimation of being about to be sent to the workhouse preyed upon her mind, and led her, whilst left alone, to attempt self-destruction. She got a razor and inflicted a wound of about five inches in length in her throat; but she did not injure the trachea or any of the larger arteries. The wound being dressed, she was sent to the hospital.

S—E—, a dissipated-looking man, jumped from off the parapet of Blackfriars bridge, intending to commit suicide, but was saved by a waterman. He was subsequently taken before a magistrate, when his father stated that his son was at times insane, and had been confined in an asylum for six months. His intellects had been impaired by excessive drinking.

J—H—, 23 years of age, put an end to his existence by swallowing a very large quantity of oxalic acid. It appears the unfortunate man *had been in a very desponding state of mind for some length of time*. He was taken to St. Thomas's Hospital, where the house-surgeon used the stomach-pump and other antidotes, but with no benefit. No cause was assigned for the rash act.

Z—J— was charged, at the Guildhall police-court, with breaking a quantity of glass and a portion of the furniture in the house of Mr. E—.

E—S—, assistant to the prosecutor, who keeps a fancy repository, said he was attending to some ladies, when he heard a violent knocking at the door and ringing of the bell. The housekeeper opened the door, and the prisoner made his way in, and immediately rushed up stairs. Witness obtained the assistance of three constables from the station, but in the meantime the prisoner had locked himself up in the drawing-room on the first floor, and having broken all the glass, he commenced throwing out the furniture from the window, and when the constables arrived he was in the act of throwing himself out. The officer said, that on coming to the assistance of the last witness, he saw the prisoner getting out of the window; he immediately ran upstairs and forced open the door, and was just in time to catch hold of the prisoner by his coat, as he was in the act of jumping from the window into the street. He struggled very violently, but with the aid of the other officers the prisoner was ultimately secured.

Mr. Christie, relieving-officer, said he knew the prisoner well. In October last, he placed him in a lunatic asylum, and in December he was adjudicated as belonging to the parish of S—, and was accordingly removed thither. He was discharged in April last, since which time he had been living with his mother, a very hard-working and industrious woman. The prisoner had previously been confined in the Bethlem Lunatic Asylum, and his father had been similarly placed.

Alderman Salomons ordered him to be taken to the East London Union, under the 16th and 17th Victoria, which provides that wandering lunatics should be taken to the union of the district in which they might be found wandering.

On March 17th, 1853, I—T—, a boot and shoe maker, residing at No. 4, Princes-place, Clifton, Bristol, destroyed his two children, one aged four and a half and the other six years, and afterwards committed suicide. On the day above named his wife had occasion to go to Bristol, and left her husband at home with her two children. After she had gone, he sent the servant girl out on an errand, and upon her return, finding the door of her room locked in which she had left her master and the two children, she obtained assistance, and upon the door of the room being broken open, it was discovered that the children had been both murdered, and that the father had terminated his own existence. The head of one child was completely severed from the body, and the murder was effected by the

means of a shoemaker's knife very much sharpened. T—— had lately been in a very desponding condition, and was heard to express a fear that he would not be able to carry on the business, but he was not in any pecuniary difficulties. At an inquest held on the bodies, the above facts having been proved before the jury, they returned a verdict—That deceased having murdered his two children, committed suicide while labouring under a state of temporary insanity.

J—— M——, a shoemaker, about 57 years of age, murdered his wife, and afterwards committed suicide. The house was tenanted by M——, who with his wife occupied the parlours, letting the remainder out in lodgings to various persons, and one of the upper rooms to his married daughter and her husband. Shortly after eight o'clock on Wednesday morning, Mrs. W——, M——'s daughter, came down stairs, and, not finding either her father or her mother up as usual, knocked several times at the door of the front parlour, occupied as their bed-room, but receiving no answer, she effected an entrance, and found the place covered with blood, and the lifeless bodies of both her parents lying across each other on the bed, both of them quite dead and cold, and a shoemaker's knife covered with blood was found on the bed, near the right hand of the husband. They were both in their night-dress, and the head of the woman was literally severed from her body. A letter had been written by M——, stating the circumstances which led him to commit the horrible crime. Both himself and his wife were seen and conversed with at twelve on the previous night, and both seemed in their usual health and spirits. An inquest was held on the bodies, when the following was the evidence given on that occasion.

Mary W——, the daughter of the deceased, stated that the deceased was a boot and shoe maker. "I found my father and mother dead on the morning of Wednesday last, in their bed-room, and medical assistance was sent for. I saw my father on Tuesday night, between nine and ten o'clock, and spoke to him, and about eleven I was looking out of the window, and saw my mother coming home, but I did not go down to speak to her. When I saw my father he was in the parlour, and I went down to see how he was, for he had been poorly lately, and complained of pains in his head. He could not sleep well or lie down in his bed for some weeks past; when he complained of his head he felt confused and had strange sensations. His appetite had also failed him lately, but he had not had any advice. He was a very temperate man, and had lately three or four bottles of medicine from Mr. W——, the chemist, in W—— street. I have noticed my father apparently bewildered lately. I never heard him threaten to destroy himself or my mother: quite the contrary." A letter, identified by the daughter as the handwriting of her father, which was found upon the mantelshelf, and addressed to Mr. ——, the landlord, was read, of which the following is a copy:—

"March 28, 1854—9 o'clock, p.m.

"Mr. C——.

"Sir,—I am extremely sorry that the settling of my rent to-morrow will be in a way you little think of, which must be by your taking my goods, and I hope you will find sufficient to pay you. I find it impossible for me any longer to work so as to be able to keep myself, and I have no wish to live on the labour of others. The asthma which I am troubled with precludes me from working to do any good, more than the few warm months of summer. My eyes are likewise failing very fast, so that I have made up my mind to leave this world. And as you know the dreadful state of mind my wife is sure to be in if I leave her, I have made up my mind that she shall go with me.

"To my children.

"I dare say you will censure me for the rash act which I am about to commit; but if you think it over seriously, you must know that your mother will be better off a great deal than being left behind me. Hoping you will get over the shock with as much firmness as you can, I remain, dear children, your affectionate father,

"J—— M——.

"To Mr. Carter—I remain, sir, yours most respectfully, and sincerely thank you for all favours.—J. M.

"To my very particular friend Mr. W——, of W—— street—Good bye.—J.M."

Mary W——, the witness, then continued, who further stated: I have often

seen him resting his head upon his hands, and heard him complain of his head. He was on the most friendly terms with his landlord, Mr. C——. He was not in want of work. My father and mother were living upon the most happy terms. He never used her ill in any way. She was a very sober person, and as kind to him as he was to her. I don't know that he was in difficult circumstances. He was two quarters behind in his rent. He has held the house nineteen years. He was not a proud man, but quite the reverse.

Mr. I—— N—— J——, surgeon, stated that he was called to see the deceased persons about half-past eight on the Wednesday morning, and found them in bed with their throats cut, and the smaller knife grasped in M——'s right hand, and the larger knife lying near the bottom part of the bed, on the wife's side of the bed near her feet. There was no blood flowing; the bodies were stiffened, but not quite cold; the bed-clothes were not in the slightest degree disturbed, indicating not the least struggle; the only unnatural position was the elbow of Mr. M——, which was placed over the throat of his wife. I did not notice that the upper part of the wife's bed-gown had been cut; the wounds were very large, and the principal vessels of the neck, in both cases, divided. The woman's throat was cut down to the bone—to the vertebrae—those wounds were the cause of death. I have no doubt that the man made both the wounds; it is impossible from the character of the wound in the wife's throat that she could have inflicted such a wound herself. I believe the wounds were inflicted in the night.

Emma S——, a lodger in the house, stated that she thought M—— lately to have been more dull than usual. He was very dull on Tuesday night, and said but very little; had heard him say he could not sleep or rest on his bed. Between ten and eleven o'clock on Tuesday night, he fancied he heard a knock at the door twice, and that it was Mrs. M——, and he went to the door, but there was no one there. When Mrs. M—— came home, she was very full of spirits, and she came and spoke to me in my room, which was next to that where the bodies were found. I saw Mr. M—— write a letter like that produced, and he held it up to me, and said, "There, do you think that will do?" I said, "I don't know, is it going to a young woman?" and he replied, "Oh no, nothing of that kind."

George M——, son of the deceased, stated that he worked with his father in the same room, for company's sake. I worked there on Tuesday morning, and had remarked a great change in him lately. He was an industrious man generally. He told me he was prepared for his rent. I am not aware of any circumstances lately to disturb his mind, but I have heard him say he should be sorry to be a burden to any one. I never knew him the worse for drink, or to have any words with my mother. He was a man very fond of reading, but his sight has been getting bad for the last three or four years.

The coroner, Mr. Wakley, expressed a wish to have the deceased man's head opened, as he thought that sufficient disease would be exhibited to show that when he committed the dreadful act he was in such a state of mind as not to be responsible for his own actions. A most important lesson, it appeared to him, would be taught the public by this inquiry. Here was this poor man for months with a pain in his head, showing that his brain was affected, and he could get no sleep, and yet he could get no medical treatment, except what he obtained from a chemist and druggist, who probably knew nothing at all about what was the matter with him. It was a remarkable thing that so little attention was paid to the head, which was the principal organ of our system; persons would attend to an arm or a toe if it was diseased, but not to the head; that disease was allowed to creep on in the head until it rendered the state of a man's mind such as to lead to deplorable acts like that they had met to investigate that day. He felt firmly convinced that had this poor man had proper medical treatment six weeks or two months ago, he and his wife might be alive at this time.

It was decided that the head of this unfortunate man should be examined, to ascertain, if possible, by such examination, what was the probable state of his mind.

Mr. Wakley added that he had no hesitation in saying that six out of every seven cases of suicide might be prevented if, when a person loses his sleep and becomes first attacked with unusual pains in the head, he immediately sought medical advice.

The head having been opened by Mr. J——, the surgeon, he stated : I found the dura mater very much thickened and inflamed, and the pia mater and arachnoid also inflamed—the brain itself was very healthy, but injected. I should say that the brain had become injected within the last three months. If the man had sought medical advice, the treatment would have been either blister or bleeding about the head, and medicine of an aperient character. The ventricles were devoid of fluid. There was quite enough disease to account for pain in the head. There was no disorganization of the brain.

It appeared, from the statement of one of the jurors, that the wife had been insane, and in a lunatic asylum, and he thought she was as likely to cut her husband's throat as he was her throat ; but Mr. J—— said that, from the position of the bodies, that was impossible.

The coroner, in summing up to the jury, repeated his conviction as to the necessity of immediate medical advice being resorted to in all cases of pains in the head or disturbance of sleep. The law held homicide to be murder ; and in this case, if the jury believed the deceased to have been in a sound state of mind when he committed the act, they had no alternative but to return a verdict of wilful murder, and *felo de se* ; but he thought, after the evidence showing there was active and extensive disease of three of the membranes of the head and brain, there was no doubt that when the deceased man committed this act he was not a responsible being.

The jury returned a verdict—That the deceased, J—— M——, deprived his wife of her life by cutting her throat at a time when he was labouring under an unsound state of mind, and also deprived himself of life while in the same state of mind by similar means.

It subsequently transpired that the wife had been afflicted with insanity, and twice been an inmate of the lunatic asylum, but had latterly become perfectly restored, and was an exceedingly industrious and well-behaved woman, aiding her husband by going out charring in the neighbourhood. Doubts were entertained whether she was not herself a party to the horrible crime her husband committed, and a very remarkable fact was also stated by Mr. C——, the landlord of the house, that M—— himself, about twelve months since, in a conversation with him, informed him that his wife had made a proposal to him to murder her, and then destroy himself, so that having lived so long together, they might die together ; adding that she could not live in the world without him. This conversation is taken to account for the remark made in the letter written by the unfortunate man the evening before he committed the crime, addressed to Mr. C—— : “and as you know, sir, the dreadful state of mind my wife is sure to be in if I leave her, I have made up my mind that she shall go with me.”

G—— W——, after attempting to murder his wife, committed suicide by cutting his own throat from ear to ear. He had evinced a slight aberration of mind for some days past, but retired to rest with his wife on the Sunday evening, apparently much better than he had been. Nothing particular occurred until after five o'clock on the Monday morning, when his wife was awoke by his attempting to cut her throat with a razor. She rushed from the room to procure assistance, and upon her return her husband was found a corpse, having nearly severed his head from his body.—Verdict—Temporary insanity.

B——T——H——, a tin-plate worker, residing at 15, K—— street, S——, 34 years of age, committed suicide by cutting his throat with a knife, after a desperate attempt to murder his wife. For some time past he had treated his wife unkindly, and it is supposed that latterly he had entertained suspicions, which continually haunted his mind, that his wife was not faithful to him. On Wednesday, December 21st, 1853, before the attempted murder was committed, his wife had been confined, and ever since the birth of the child it had been the subject of repeated taunts from her husband. When she was confined, he came and looked closely at the infant, shook his head, and said, “Enough, enough.” His wife's mother had come up from Lancashire to nurse her daughter in her confinement, and her presence operated as a considerable restraint upon the ill-treatment of H——. On the Saturday evening, the 24th, he taunted his wife about the child, but afterwards became more calm, and took the mother-in-law out, with a view, as he said, of purchasing some neces-

saries for the infant. After having been out some time together, he escaped from the mother-in-law, and returned home in a frantic state, dashed into his apartment, and with a sharp-pointed Italian spring knife open in his hand, he furiously stabbed his wife as she was lying on the bed with her infant, without making any observations, inflicting several severe wounds upon the fleshy part of the right arm and side. When found by the police, H—— lay partly on the bed, with his head nearly severed from his body. The carotids on both sides were literally cut through, and so were all the structures of the neck down to the cervical vertebrae. It was an unusually extensive wound for a self-inflicted one. He was quite dead. The wounds on the wife were no doubt inflicted with the knife, while his own throat had been cut with a razor, which was found in the bed-room smeared with blood. He had purchased the razor last summer, and in a quarrel with his wife stated that they should both go off together in one bloody bed. His wife was 27 years of age, and had been married only eleven months.—Verdict—Temporary insanity.

W—— T—— made a most determined but ineffectual attempt to murder, followed immediately afterwards by the suicide of the young man himself.

It appeared from the evidence at the inquest, that Miss W——, a young woman, proceeded to S—— street on the Monday morning to collect the rents of houses belonging to her father, and in doing so she entered the dwelling of T——'s mother, a widow and monthly nurse. Mrs. T—— paid the rent, and Miss W——, after entering it as usual in her book, addressed the deceased, who was moodily pacing the room, inquiring after his health, which had been declining. He replied he was not much better, and then suddenly advanced to where she sat behind the door, and raised his hand as if to strike her. Miss W—— screamed, and T——, with a razor he had hitherto concealed, instantly inflicted two wounds on her neck, and a third on her shoulder, besides cutting her dress in several places. His mother now sprang forward and seized his arms from behind, but the unhappy man stooped his head, and his throat coming in contact with the razor, he inflicted a deep wound which severed the principal veins and arteries, and resulted in death half an hour afterwards. Two neighbours, attracted by Mrs. T——'s cries, entered the house, and having removed Miss W——, took the razor from the hand of T——. Upon the arrival of the surgeon, Miss W——'s wounds were sewn up, and prompt assistance rendered to the deceased, but he expired, declaring himself poisoned. It appeared that for some weeks past T—— had been unemployed, and during that time he had been subject to monomaniacal belief that his food was poisoned, refusing to touch it until his mother or sister had previously partaken of it in his presence. In consequence of these delusions, he was examined by Mr. Freer, surgeon, who recommended his removal to a lunatic asylum ; but his mother, believing his insanity to be merely temporary, neglected to follow the advice.

After a lengthened inquiry, the jury returned a verdict of insanity. His mind was said to have been impaired some time past.

N—— S—— was a basket-maker, residing at B——. He had three children, two boys and a little girl, all by a former marriage. The boys were aged, one eleven, and the other was in his seventh year. On Wednesday morning he went out and took the two boys with him, but did not assign any cause for doing so ; he also wanted to take the girl, but his wife sent word to the governess where she was at school not to let her out. The youngest boy, who was also at school, he called for himself. The wife begged of him and entreated him not to take them away ; but pushing her away from him, he told her she should not see him again, but would hear from him in a few days. On the following morning the widow received a letter from her husband, of which the following are the contents :—

“By the time you receive this, me and my boys will be locked in the arms of death, and I am very unhappy that the girl is not with us. You have to thank your own temper towards me, and I made up my mind on my pillow this morning what I should do before I started ; but I have little comments to make, but your temper has been that to me, that it has preyed on my mind for some time ; but it is finished before this time, and I hope that my girl will grow and be a good girl, and I should have been happy to have had her with us, and I hope that you will govern

your temper for the future. You have none to thank but yourself for this, and I hope that you will do well. God bless you both for ever. Amen. M. S."

The following day the bodies of the man and the two boys were all found drowned in the river Thames, between P—— and W——. The body of the man was floating by itself, and the bodies of the two boys were fastened together by some stout twine, formed into loops round the waist, and a longer piece encircled them both together. The boys were tied about a foot apart, there were no marks of violence about them, nor any handkerchief nor anything tied about their eyes. The man was tied round the arms by a cord, but not so close as the boys; his legs were fastened by a stout willow, which was again crossed by another, as well as one twisted very tightly round his throat, nor had any of them either a cap or a hat on. When the bodies were searched, there was nothing found that could show the cause of death. The boys were tied face to face by four lines of twine, which were knotted quite tight, and the withes round the man's throat and ankles were fastened very tight indeed. They were all met on the previous evening about half-past seven o'clock, on the road from P—— towards H——, when they all appeared very cheerful, and the two boys were playing along the road with sticks and the bung of a barrel.

The widow of the deceased stated that they had been married eighteen months, and that about two months after that event the husband tried to cut her throat, and she was obliged to put both razors and knives away. He was addicted to drink, and during such times he was nearly mad. I am certain he was in a deranged state of mind. He treated me very cruelly, and often beat me. On one occasion he took the children out of their beds at three o'clock in the morning to destroy them, but I prevented him.

It also appeared, from the evidence of the apprentice, that when sober, deceased was fond of his children and spoke very highly of his wife, but when intoxicated he was very bitter against her. Business had much fallen off lately, and he was much beside himself. He was much embarrassed, and had no capital to execute an order which he had received, which preyed upon his mind, and he told the apprentice he should not mind if his time was come to walk the plank and die. His wife had always behaved with propriety, but he often raised a quarrel with her for no cause.

Verdict—That the two boys, N—— J—— S——, and W—— S——, were wilfully murdered by their father, who afterwards committed suicide by drowning, while in a fit of temporary insanity.

J—— D——, gardener, murdered his wife and child, seven years old, and committed suicide by drowning. About a hundred yards above the spot where the bodies were found a large clasp knife such as is used by gardeners was discovered. The wife and child were found in the cottage of deceased lying on the floor with their throats cut, so that their heads were nearly severed from their bodies, the furniture of the room much disordered, and from the marks of blood on the several doors and the wounds inflicted on the woman, it was evident that a dreadful struggle had taken place between her and her murderer. The woman and child were both in their night dresses, from which it was evident that the attack upon them had been made after they had retired to rest, and by marks of blood being found upon the bed of the latter. The body of the woman presented an awful sight, having a deep incision in the neck, extending obliquely from the right side below the throat to the back of the neck on the left side, dividing the muscles, vessels, windpipe, and gullet, notching the front of the spine, and completely severing the lateral bony process of the spine. It was a double cut, one superior and superficial—the second, upwards of six inches in length, down to the muscles extending from the right shoulder, and terminating on the collar bone. There were other wounds on the neck and other parts of the body, with a large bruise and an infusion of blood on the left temple. The lad had received a deep gash, confined principally to the right side of the neck, dividing muscles and vessels, and penetrating between five and six inches to the spine, and partly severing the head from the body; the cut commenced at the back of the neck and extended obliquely downward to the top of the breast-bone.

It appears that he had for the last few days been labouring under great depres-

sion of spirits, to which he had been previously subject, and that after committing the crime he attempted to hang himself in the green-house.

D—— had for a number of years, at different times, suffered from mental debility, so much so, as at times to appear like a madman. He had left several situations in consequence of the diseased state of his mind, but all was kept secret from his employer, to whom he had for three years been a faithful servant, and so much so, that he had consulted his medical man, Mr. Cotton, on the previous Monday, to attend him, which he did, but did not consider him in a bad state, although he had afterwards recommended that he should have a change of scene and air, in the hope that it would be the means of recovering him from his hypochondriacal state of mind, which would soon degenerate into insanity, so as to cause him to commit some dreadful crime.—Verdict—Insanity.

Mrs. G—— murdered her child, and subsequently destroyed her own life by drowning. The infant was only four months old, and the bodies of both the mother and child were found drowned in the water-butt. Dr. Marsh promptly attended, and used every means to restore animation, but without success. The mother was represented to have been a well-conducted, sober, and industrious woman, but having been in ill health *ever since the birth of the child, that circumstance is supposed to have preyed on her mind, and produced despondency, which had prompted her to the perpetration of the murder of the child, and the subsequent destruction of her own life.*

The jury returned a verdict—That the deceased infant was wilfully murdered by her mother, being at the time in a state of temporary insanity.

An inquest was held on the bodies of Mr. A—— N—— and Mrs. H—— N——, at the residence of the deceased. Mr. N—— was an agent, well known as one of the largest shipping merchants. Mrs. H—— N—— was his sister-in-law, the wife of his late brother, L—— N——. Mr. A—— N—— was a widower.

It appeared from the evidence, that both Mr. and Mrs. N—— attended church on the Sunday morning, and again in the afternoon of the same day. That they afterwards accompanied a Mr. C——, one of the executors of the late Mr. L—— N——, and husband to the deceased lady, to his house to tea, and returned home early in the evening. The servant, at the request of Mrs. N——, brought two tumbler glasses and a jug of hot water before retiring to bed. The next morning the boy went into the dining-room to open the shutters, when he found Mrs. N—— lying dead on the floor. The servant-man instantly proceeded to Mr. N——'s bed-room, when he found him suspended, by the cord of his dressing-gown, to the mahogany bar of his bedstead, with his knees touching the floor. The bed was quite warm, as was also the body.

Mr. H——, a surgeon, stated that he had made a post-mortem examination of the bodies, and that upon the head and windpipe of the deceased lady there were marks such as might have been made by finger-nails, and that those marks corresponded to ecchymosis. Immediately underneath, the great vessels were gorged with blood, and on opening the chest he found the lungs gorged with venous blood, and the right side of the heart also. There was nothing found in the stomach; it was in a perfect state of health, and free from any appearance of poison. The head and membranes of the brain were highly congested. The condition of the head, lungs, and heart was quite sufficient to account for death, which arose from strangulation; there was nothing else to account for the death. On the nose of Mr. N—— there was a bruise, such as might be caused by a scratch, which it was supposed he might have got in an encounter with the deceased lady. Mr. N—— was about 28 years of age, and Mrs. N—— about 30, and had had two children, and she had resided with Mr. A—— N—— since her husband's decease.

Mr. J. H. H——, jun., who acted as solicitor to the executor of the late Mr. L—— N——, deposed that he had been in the habit of seeing Mr. A—— N—— on business matters; that he had one or two interviews with him on the 15th, and again on the 26th of December, and several times afterwards. That Mr. N—— had said upon one occasion, when going through a number of accounts, "*I must give up this work; it makes my head feel bad, it makes me ill, and confuses me;*" and

on two or three occasions after the 26th of December last, he said, "Well, this business upsets me; I hardly know what I am doing, my head is so bad." He also on one occasion said that the medical man had told him that he must not exert himself too much, that it would make him ill. On another occasion, having some conversation as to the transaction with the business at the Stamp Office, he became cross and irritable, more so than witness had ever seen him before, and that while witness was adding some accounts, he made a remark which he could not catch; and upon asking him what it was he said, he made no reply, but continued staring at the fire, and did not look up. Without speaking a word, he jumped up from the chair, slipped on his coat in a minute, and bounced out of the room without saying a word. Witness further stated, "I remember him at school, some nineteen or twenty years ago, and he was always looked upon as a weakly, soft-headed boy, compared with his brothers. He was decidedly passionate and impulsive, and did not control himself."

Mr. C— H— B— confirmed the evidence given by Mr. H—, that he was extremely irritable, and excited by the least thing. He was a temperate man. About seven or eight years since he had been in business in L— on his own account, in partnership with one or two other persons, since which time he had not been in any business.

Mrs. N—, his mother, was insane, and was confined for some years, and two brothers also died by their own hands. A sister of his at the present time is not in a sound state of mind.

Mr. Harrison, the surgeon, said that not only would it be possible, but extremely probable, that such a person as Mr. N— had been represented would, under extreme excitement, be betrayed into maniacal impulses. There are many cases of this nature. People who are capable of pursuing the usual transactions of life without showing any external appearance of insanity, may, from a sudden impulse, commit either great crimes or some act that would fall under the common denomination of insanity.

Verdict—That Mr. N— destroyed the lives, first of Mrs. N—, and afterwards of himself, being at the time of unsound mind.

A Mrs. S—, with her son, S— S—, a young man little more than 20 years of age, an engraver, who is stated to be somewhat weak in his intellect, resided with her brothers, Messrs. J— and T— D—. The youth, it appears, had lately been depressed in spirits, in consequence of a slackness of work, and on Saturday morning, the 18th of March, he went to the house of his cousin, J— P—, a pistol finisher, and asked leave to cast some bullets to fit a small pocket pistol he had borrowed from a companion with whom he had been out shooting. He found, however, that the mould would not fit the pistol, and having cut up some lead into slugs walked away, remarking that he would go and have a good shot, as there was some waste ground near his dwelling. Shortly afterwards he returned home and breakfasted with his mother, one of his uncles, his niece, and his grandmother. After breakfast he was left alone with his mother, and directly afterwards, hearing the report of a pistol, M— D—, the niece of Mrs. S—, rushed into the room, and found her aunt falling from the chair covered with blood, her son, S— S—, standing beside her with a pistol in his hand. The girl exclaimed, "Oh, S—, what are you doing?" he made no reply, but turned and looked at her for an instant, and then ran upstairs. Mrs. S— lay upon the floor, with the blood flowing from a dreadful wound in her head, and the cries of the terror-stricken niece on beholding a sight so appalling brought several persons to the spot. Shortly after, another report of fire-arms was heard upstairs, and the youth who had thus murdered his mother was found dead by his bedside, shot through the head by his own hand. Death, in both instances, must have been instantaneous. It is supposed that the fear of seeing his mother reduced to want had preyed upon his mind, and had prompted him to the commission of the murder. The mother was 50 years of age, and respectably connected.

C— B— was tried at the Huntingdon assizes, March, 1849, before the Lord Chief Baron, for the murder of his daughter, a child two years of age, by cutting her throat with a razor.

At the P— summer assizes, in the previous year, the prisoner was tried before Mr. Baron Parke for the murder of his wife. On that occasion, as now—both the lives having been taken away at the same moment almost—the defence relied upon was insanity; but the jury finding the prisoner guilty on the former occasion, he was left for execution. Further inquiry, however, having been made into the state of his mind; he was reprieved by the Secretary of State, in order that he might be put on his trial for the murder of his daughter, and an opportunity thus afforded for the production of an additional evidence which might be obtained in the meantime.

The evidence now adduced for the prosecution was to the effect that the prisoner, on the day before the death of his wife and child, took the latter with him to a neighbouring barber, when she sat on his knee while he was being shaved. That day he directed a razor to be ground for a lodger. At four o'clock in the morning, a noise was heard in the prisoner's house, and when his next-door neighbour got in he found the prisoner standing in his shirt, bleeding at the throat, his wife and child lying dead at his feet, with their throats cut nearly in two. The prisoner was asked by his neighbours as to the death of his wife and child, of whom he was particularly fond, but he said nothing until he saw Mr. N—, a surgeon, who, on arriving, said to him, "Good God! B—, what have you done?—had you and your wife quarrelled?" The prisoner only shook his head, his wound preventing him making any articulate reply. When asked if he had been in any trouble, he nodded. In a little time he got better, but remained moody and depressed, till at length, in answer to the question, "Why did you do it?" he said, "Trouble made me do it." He was then asked when he first thought of it, to which he replied, "only at the moment when I got up to destroy myself; I had the razor sharpened to destroy myself, and had contemplated doing so for a week, during which I had pains in my head. I did not sleep that night, and got out of bed to destroy myself, when a thought came across me that if I did, my wife and child would come to want when I was gone. I then instantly attempted to cut my wife's throat; she was partly asleep; when I attempted to do so, she jumped out of bed and rushed to the window, shrieking 'murder.' I then cut the child's throat, and went to the window, where I took my wife in my arms and threw her on the floor backwards; I then pulled back her head and cut her throat a second time, which destroyed her, after which I attempted to cut my own throat, but could not carry it out."

When cross-examined, Mr. N— stated that he did not think the prisoner was in a sound state of mind at the time he did these acts, and there was nothing in his subsequent communications with the prisoner which would lead him to alter the opinion that he was insane, though he observed no delusion.

In order to prove the prisoner's insanity, Ann Jordan, a daughter of the prisoner's grandfather by a second wife, stated that one of her (witness's) sisters was now insane, and another had cut her throat.

Matilda Gorham stated she had known the prisoner all her life—he was a cheerful man, but the week before the murder she observed a change in him.

F— B—, the brother of the prisoner, stated that, as he had heard, his uncle John, who is dead, was insane.

John Wise stated that he had seen the prisoner soon before the murder, and thought him strange, inconsistent, and altered from what he had been; he thought him in an unsound state of mind then.

Mr. Z—, a surgeon, stated that he had seen the prisoner before the murder, and observed a gloominess and silence in him. He saw the prisoner on the Monday, when he was suffering from mental depression, he then thought him of unsound mind, and thought him so still. He said, "I was not surprised at the murders, for I fully expected he would destroy himself. The countenance will betoken the state of the mind." Upon his cross-examination, he added, "I believed he was a lunatic when I saw him. He was dealing in bones and rags to the last, and neglected to bring me a grate from P— for some weeks."

George Smith, the governor of the gaol at H—, stated that the prisoner had been in his charge since the last assizes. "He has shown symptoms of insanity, and I treated him as an insane man. He once told me that a cat had been thrown on him to tear him to pieces, and that he had been put under a cart to be killed.

He received the announcement of the day fixed for his execution, after the last trial, with unconcern, and has always told me he has committed no offence, and has treated the deaths of his wife and child without any concern. I have always kept two men in the room with him, and think he was, and is, of unsound mind. I am sure that his feelings expressed to me were real, and that he practised no dissimulation. I was aware that he had attempted suicide before he came to the gaol.

Evidence was then given to show that the prisoner was not insane, and it was stated by a Mr. G—— W——, a surgeon, that he saw the prisoner on the day before the death of his wife. I observed no change in him. I spoke to him, and have been in the habit of seeing him two or three times a day. I do not think, as far as my judgment goes, that the existence of madness is to be inferred from the facts proved, but they are not inconsistent with mental disease.

John Cobley, a cousin of the prisoner's, who had known him thirty years, stated that he went with him to P—— on the 27th of May. On our way home he called at Mr. M——'s, and got a razor. I stayed with him till half-past seven o'clock, and saw nothing peculiar in his manner throughout the day. I decline to say whether I have myself contemplated suicide.

Mr. N——, the surgeon, positively swore that the last witness had spoken to him in the manner and terms denied by him.

The Chief Baron, in his summing up, said the question for the jury was, whether they thought the act of cutting his child's throat, under the circumstances proved to them, was the act of a desperate and wicked man, conscious of what he did, and regardless of the lives of others and his own, or whether it was the act of a man oppressed by disease which affected his mind to such an extent that, while it left him some rays of reason, rendered him a person of unsound mind. The plea of insanity could only be supported by proof of positive disease. The act itself ought not to be taken as a proof of insanity, and it was a matter of surprise that no medical man had been called who had observed the prisoner's conduct while he was in gaol; such testimony would have been more satisfactory than that of the gaoler, and the jury must form the best conclusion they could with that evidence which was before them on this case, the result of which would deeply affect the public. Atrocity was not to be taken for insanity, but at the same time there could not be a more dreadful spectacle than the execution of a man who was guiltless of crime before God.—Verdict—Not guilty, on the ground of insanity.

M—— J——, aged 23, was indicted for the wilful murder of her own child, E—— J——, and her niece, M—— S——, at the town of W——. This double murder was committed under the following circumstances:—

The prisoner was the wife of one E—— J——, and had been married about two years, and had the child named in the indictment, who was eighteen months old in August last. There was also living with her husband and herself the little girl, M—— S——, about 12 years old, the daughter of one of her sisters.

Between the prisoner and her husband there had always existed the best feeling, and towards her own child she had never, before the murder in question, been observed to act otherwise than with affection, nor was there anything to show the slightest ill-feeling against the little girl. It appeared, however, that for about eight months before the 21st of August last (the latter end of 1847), the manner of the prisoner became strangely altered, and she had threatened to burn her child. She had been brought up a Protestant, but just before the change in her manner was observed, she had been in the habit of reading Roman Catholic books, and used to attend Roman Catholic worship. She had had her child also baptized by a Roman Catholic woman after it had been baptized by a Protestant clergyman. Subsequently, however, she used some expression of regret about the child's baptism, and she thought it would go to hell, and desired that the incumbent of the parish might be asked to baptize it again.

It was proved, further, that she laboured at times under the delusion that her mother (who had been dead eight or nine years) was haunting her, sometimes sitting beside her, and at other times following from behind. She was subject, too, at intervals to severe paroxysms of excitement, during which her violence was so great

as to render it necessary to hold her by force. Her friends obtained from a surgeon a certificate of her being a lunatic, and she was admitted into the W— Union workhouse, preparatory to her being sent to the county lunatic asylum. In the workhouse she was put in the insane ward, and exhibited the same illusion and the same violent paroxysms as she had before shown; and the surgeon of the union, upon his examination, stated that he also considered her of insane mind, subject to lucid intervals. By the 13th of September, as appeared by the same surgeon's evidence, she had become better, but, in his opinion, not in a condition to be left alone; and having no power to detain her at the workhouse, it not being a licensed asylum, he allowed her to leave the workhouse, and return home with her friends, who came for and who took her to her own house, and most imprudently left her with the two deceased children, her husband at the time being from home.

About eleven o'clock the same night some of her neighbours were alarmed by shrieks proceeding from her house, and upon going thither discovered that the shrieks proceeded from her. She was discovered standing in her bed-room window in her night-dress brandishing a knife, and she was heard to call out several times, "I have cut their throats!—I have cut their throats!" Several people then entered the house, the unfortunate woman's brother being one of the number, and the first to enter. On seeing her brother she called him by his name, and said, "I have cut their throats—come and cut mine;" at the same time drawing the knife which she had in her hand across her own throat. Her brother immediately rushed upon her and secured her hands, but not before she had succeeded in inflicting two severe wounds on her throat. He then gave her into the keeping of other persons present, and upon going to the bed in the room, the most horrible sight presented itself: the head of the elder child was hanging from the side of the bed, and attached to the body by a mere integument. He then turned down the bed-clothes, and there saw the younger child's body and head, the latter completely severed from the body, and lying beside it. Under the bed and about the room, as the witness expressed it, there was "a lake of blood." The unfortunate woman was then taken off in custody, and to the constable she minutely described how the dreadful deed had been accomplished with the knife she held in her hand. She said that having failed to find her husband's razor, she took a common knife, sharpened it, and cut the "poor things' heads off—the youngest first; and then added, "I am all right; take me to S—. She was seen soon after by one of the surgeons before spoken of, and he and all the witnesses clearly proved that then, as well as for a period of eight or nine months before the dreadful occurrence, she had been of insane mind, subject to lucid intervals. It appeared also that while in the workhouse she had suffered from a severe attack of smallpox, the effects of which were such as to affect the brain.—Verdict—Not guilty, on the ground of insanity.

T— W—, aged 45, was indicted for the wilful murder of his wife, E— W—, at B—. The following are the facts of this case:—

Mary Price, an elderly woman, a cousin of the deceased, went to the cottage of the prisoner, as she was frequently in the habit of doing, and found the prisoner and his wife at tea, and, at the invitation of the prisoner, she joined them, and he placed a cup and saucer for her. About seven o'clock she left, promising to call the following morning to send some things to the Haymarket by the deceased, who expressed her intention to go there. On the next morning, about ten, she again went to the prisoner's cottage, but found the door shut; she tried the latch, but could not open the door; she called out, "Betty! Betty!" and then she heard the prisoner's voice inside saying, "Betty is dead in bed; she cannot come to you." The woman then desired the prisoner to open the door; he replied, "I cannot do so—I cannot find the key." She then went away to the nearest neighbour's, and after an absence of two hours, returned with two men, named Powell and Clerk, to the prisoner's house. The door was still closed and fastened inside. Powell called out to the prisoner to open it; he said, "I cannot find the key." Powell told him he must force the door open, and soon after the prisoner opened it, apparently forcing the lock to do so. They then went in and found the deceased lying on the floor nearly naked, quite dead, her head and skull being beaten to pieces, and the blood and brains scattered about the floor. Pieces of a broken ladder lying near the body bore the marks of having been the instrument of death. When these

persons went into the house, the prisoner went out and walked about in front of it.

The woman, Mary Price, stated that on the previous evening the prisoner exhibited a strangeness of manner—that he would not eat at tea, and that the deceased restrained him from drinking his tea hot. The deceased had complained to witness that her husband was in an odd state of mind, the same as he had been fifteen years before; that they, prisoner and his wife, always lived on friendly terms; that he was a good husband, and she a dutiful wife.

Two other witnesses corroborated the evidence of Mary Price, and stated further that the prisoner had said, "I would not have killed my poor wife, but I thought I was killing the great goddess Diana;" and that when he came out of the house after the murder, he read aloud a part of a chapter in the Bible and a psalm. The prisoner used to be employed as a drover, and had been absent from home a month a short time before the murder, having only returned a day or two before. It was also further proved by the policeman who took the prisoner into custody that he said he "thought it was the goddess Diana in the bottomless pit he was killing."

Mr. W——, surgeon, spoke to the examination of the deceased, and to the probability of the death having been occasioned by the blows inflicted with the broken ladder, and stated that he had spoken to the prisoner at the coroner's inquest; that he talked incoherently, but he could not express any opinion as to his sanity otherwise than at that time.

The daughter of the witness Mary Price deposed to conversations, about the 25th October, with the deceased as to the state of the prisoner's mind, in his presence, and also to the odd manner exhibited by the prisoner at the same time; and that the deceased said her husband "had a spell, and she must get it removed, cost what it might."—Verdict—Not guilty, on the ground of insanity.

A woman named B—— was charged with the murder of her two children by throwing them into the canal. She had been committed to prison, and was brought to the court two years since, but was at that time too insane to plead. At the summer assizes she was again put to the bar, it being then supposed that she was so much better, and therefore able to plead and be discharged. Seeing so many people in court, and the naming the offence when she was arraigned, had such an effect upon her, that it became necessary to remove her instantly from the court. At the assizes, she was again brought up, and appeared quite calm and collected; and when she was called upon to plead, she said she was "not guilty." No evidence being offered against her, she was given up to her husband.

M—— P——, a married woman, 42 years of age, an inoffensive, motherly looking woman, attired in deep mourning, was indicted for the wilful murder of S—— S—— P——, her daughter, by cutting her throat. The prisoner had been previously arraigned at the Lent Assizes, and was then found insane and unfit to plead, and since that period she had been confined in gaol, but having now recovered, was placed on her trial. The question for the jury to decide was, as to the state of mind of the prisoner at the time she committed the act imputed to her. The prisoner was the wife of a labouring man near C——, and had always borne the character of an affectionate wife and mother. In 1849 she was delivered of the child in question, and it appeared that shortly after her confinement she was observed to be in a very low and desponding state, and was frequently heard to exclaim she did not know how she should be able to live, as her husband's wages had been reduced. Soon after this her husband was discharged from his employment, and this preyed heavily on her mind. On the morning of the day named in the indictment she went in her night-clothes to the house of a neighbour, named Cook, a shoemaker, in a wild and excited state, and exclaimed to him,—"I have killed my poor dear babe, and have tried to kill myself, but I can't." Upon Cooke saying he hoped it was not true, she told him it was, and put her hand up to her throat, when he observed blood oozing out between her fingers. Upon going to the house the child was found quite dead, covered with the bed-clothes, and the razor with which the act had been committed lying by its side.—Verdict—Not guilty, on the ground of insanity.

H— R— was indicted for having at A—, in the county of C—, wilfully murdered her new-born female child. It appeared that the prisoner had lived in the service of Mr. H— P—, a farmer at Sidehouse, A—. On being charged by her master with being in the family-way, she denied it, but it afterwards transpired that she had been delivered of a child. She was said to have been a good, kind-hearted girl whilst in his service, but was subject to great depression of spirits, and often in deep studies. The child was suddenly taken ill, and died the same evening. Five witnesses were called to speak to the prisoner's character and habits, all of whom said that she was frequently in a low state of mind; and Mr. W— M—, a surgeon, who had attended her four or five years after a previous confinement, stated that she had suffered from puerperal insanity, which lasted for a fortnight, a disease to which women are sometimes subject, caused by a suppression of milk. Having suffered from it in her first confinement, she would be more disposed to another attack at a second confinement, and being left alone, or being in a desponding state, would dispose to it. She had poisoned the child by giving it laudanum.—Verdict—Not guilty, on the ground of insanity.

J— I—, the prisoner, charged with feloniously cutting and wounding his mother, with intent to murder her, was 35 years of age, and the only question for the jury to decide was, whether at the time the act was committed the prisoner was in such a state of mind as rendered him legally responsible for his actions.

It appeared from the evidence that the prisoner lived with his mother at N—, and they were on the most affectionate terms. On the Sunday, the day on which the prisoner committed the offence, he, without the least provocation, seized a razor, and attacked his mother with it, and inflicted a most severe injury upon her throat. He then rushed into the street, exclaiming, "I have done it—I have murdered my mother." The prisoner was taken to Horsemonger-lane Gaol, where he was in a raving state of madness, and although he somewhat recovered afterwards, he relapsed upon being removed to Newgate, and Dr. McMurdo, the surgeon of that prison, stated that he was decidedly insane, and incapable of distinguishing right from wrong. It was also proved that it had been necessary to restrain him some years ago, and his mother had been recommended to place him in an asylum.—Verdict—Not guilty, on the ground of insanity.

T— C— W—, tried for the murder of his mother. From the evidence of Mr. J— C—, the uncle of the prisoner, and proprietor of a public-house at D—, in the county of M—, taken before the magistrate at L— police-court, it appeared that the mother of the prisoner resided at No. 1, Durham-place.

He stated that he was perfectly aware of the prisoner's insanity, and had taken him himself to the Bethlem Hospital; but nine months afterwards he was discharged from there, though in an uncured state, at the earnest entreaties of his mother. After three or four months, however, he was obliged to be sent to the W— Lunatic Asylum, and there he remained some time, when, at the urgent entreaties and solicitations of his mother, he was discharged. Before his discharge, the committee of the institution remonstrated with his mother, and told her if anything happened, she would have only herself to blame, and that the act of discharge was solely her own. Notwithstanding this, his mother persisted in her entreaties, and on her signing the form required by Act of Parliament, the prisoner was discharged.

From that time up to the present calamity he had lived with his mother, who had always evinced the greatest possible affection and solicitude for him. He, witness, was in the habit of allowing prisoner a certain sum of money weekly, and for this he came regularly to his house. On Tuesday week he called as usual, when his conduct was so strange that he felt it necessary to send a message to his sister, in reference to him, requesting that she would do something with him. Mr. C—, in explaining what he meant by the "strange manner of the prisoner," stated, that upon leaving his house to go to the butcher's, on the morning in question, he found him standing outside his door like a statue. That he asked him to go into the house, and that when he came back from the butcher's he found prisoner still in the same position. He asked him again to go in, but he said he preferred standing in the sun; and he then went into the yard, where the sun was shining, and remained there for a quarter of an hour or twenty minutes. I then gave him the money I was in the

habit of allowing him, and also brought him a coat from the bar which I had promised him. Having a black bag under his arm, I asked him to put the coat into it, but he refused to do so. He kept muttering something to himself; upon which I said—"Young man, I am sorry to see you in this state; you want somebody to control you properly." Upon this he became much excited, said he was an Englishman, that he should fight for his rights, and should allow nobody to control him. His conduct on this occasion was of so extraordinary a character, that I spoke to my wife on the subject, and told her I feared that something dreadful would happen.

It appears that the prisoner was in the habit of carrying a black bag about with him, in which he had a knife and a pistol; that the mother was too fond and indulgent to the prisoner; that he had enlisted twice before he had been first sent to Bethlem, but was discharged as being unfit for the army. He also made his escape from W—— Lunatic Asylum, but was taken an hour afterwards at his mother's house by the keeper, who had come in pursuit of him. The prisoner had exhibited symptoms of insanity before going abroad; one of which was, that he would leave excellent situations without the slightest cause. It further appeared that the prisoner was taken into custody by Inspector D——, of the County Constabulary, for having threatened to shoot a person in the high road, near H——, when the chief constable, before whom he was taken, perceiving him insane, after taking away the pistol with which he was armed, sent him to his mother at L——.

The prisoner was charged with the murder of his mother, and before proceeding to trial the court heard medical evidence upon the point of insanity.

Mr. H——, the surgeon, deposed that the prisoner was received into gaol on the 11th of April last, and that during the time he was there he had frequent opportunities of seeing him; that he was decidedly insane when admitted, and continued so until removed to Newgate; that the prisoner often talked about suicide, and that was his complaint. He said that he had been in two lunatic asylums, and should not be well until he committed suicide.

Mr. J—— C——, the uncle, stated that he considered the prisoner had been a lunatic for the last five years. The state of his mind was first observed after his return from South America. He was confined in Bethlem, and remained there some time, when he was discharged uncured, and went to live at the house of an aunt, where he got worse, and he was removed to the S—— County Lunatic Asylum. From that establishment he was discharged uncured, and went to live with his mother. He was at this time in such a state of mind, and his conduct of such a description, that he, witness, continually urged his mother to have him placed in confinement, for that he was unfit to be at large. He was to have been again confined, and an arrangement was made for that purpose in the evening of the very day on which the dreadful occurrence happened. He was of opinion that the prisoner had not had a single lucid interval since he returned from South America. The prisoner had also been known to stand at the door of the house where he lived, and talk to it for half an hour at a time.

The jury returned a verdict—That the prisoner was of unsound mind, and therefore incompetent to plead.

M—— B——, aged 20 years, was indicted for the wilful murder of E—— B——, her infant child. The prisoner had been married about two years, and was confined of her first child on the day mentioned in the indictment. *The prisoner's husband observed something odd in her manner, and when he went out he begged her mother to take care of her.* The mother went to the prisoner's house, found that she was upstairs, and asked where the child was. The answer from the prisoner, who was upstairs, was, that he was downstairs in the pail. The grandmother went to look, and found the baby stuffed head first in the pail, and quite dead.

Medical witnesses were examined as to the state of the prisoner's mind, and it appeared that *she had been insane before her marriage, and must have been so at the time of her marriage.* Verdict—Not guilty, on the ground of insanity.

A—— M—— was indicted for the murder of E—— A—— M——. It was clearly proved that on the day in question the prisoner had taken her daughter's child, which was two years old, and deliberately drowned it in a well. The defence set up on her behalf was, that at the time she committed the act she was insane.

The surgeon of the gaol proved that on her being brought to prison she was in a very low and dejected state, and extremely feeble, both in body and mind, so that

it was not improbable that she might be subject to a fit of temporary insanity. It further appeared that some other members of the prisoner's family had been afflicted with insanity. Further, her conduct immediately after the commission of the act was relied upon as evidence of insanity; it appearing that she had uttered loud cries of lamentation, and exclaimed, "The devil tempted me."—Verdict—Not guilty, upon the ground of insanity.

A—B—, 37 years of age, was indicted for the wilful murder of C—G—. When called upon to plead "Guilty" or "Not guilty," he said, "I don't know if I am guilty; I was insane at the time." This was treated as a plea of not guilty, and the prisoner was put upon his trial.

The evidence showed that the prisoner, who lives in a wild district, near L—B—, had exhibited such signs of violence, that on that day his wife sent for his father, and begged the old man to sleep with him that night. The father complied. During the night the prisoner was very violent, and early in the morning, after his father had gone to work, he got up, seized a stone-breaker's hammer, and threatened to take the life of an old woman of 70 who lived with him and his wife. The deceased escaped from the house, and was followed by the prisoner, still holding the hammer; she escaped into the house of a neighbour, and he, mistaking that into which she had gone, rushed in and inquired for her and his wife, saying he smelt them—that they had ruined his mother, and he would kill them both—that they would cause him to be hung. He then rushed out and went to the house where the deceased was; broke open the door with the hammer, which had been closed against him, and made for the old woman as she was trying to get up the stairs from him. Before she could get quite up, he felled her with a blow of the hammer, and then dealt her two more blows which completely smashed her head, and so extinguished life. Thereupon the prisoner exhibited signs of religious triumph, singing out, "Glory, glory to the Lord! Hallelujah! Hallelujah!"

The prisoner said nothing in his defence. The governor of the gaol handed in a paper which set forth that one of his aunts had died insane, and that it was well known at times that he was also insane. The statement as to the aunt was drawn out and made by a surgeon. It was also shown that the prisoner was at times of weak mind, that he often complained of his head, and that sometimes he was very violent.

The learned Judge placed all these cases before the jury; but after deliberating half an hour, they returned a verdict of—WILFUL MURDER; upon which the prisoner exclaimed, "The Lord's will be done."

The Chief Baron then passed sentence of death in the usual form, and the prisoner was removed from the dock apparently quite insensible to the perilous position in which he stood.

G—V—H—, aged 35 years, was indicted for the wilful murder of his wife, J—H—, by dashing out her brains with a hatchet. The prisoner exhibited great distress of mind during the trial, and was defended by counsel through the humane interference of the Sheriffs. From the statement of the counsel for the prosecution, it appeared that the parties had lived together for many years in great affection, and the only question the jury would have to determine would be, whether at the time the act was committed the prisoner was in such a state of mind as to render him responsible for his actions. He then proceeded briefly to narrate the circumstances under which the crime had been perpetrated, and said that there did not appear to have been the slightest quarrel between the prisoner and his wife; and on the same morning, the prisoner, who, it appeared, had thrown himself into the water, was found in a raving state, and perfectly unconscious of what had occurred. Mr. Baron Martin, before whom this case was tried, said the depositions clearly made out that the prisoner was not in his senses, and it would be only necessary, therefore, to prove the mere facts of the case. The following witnesses were then examined:—

M—H—, the mother of the prisoner, deposed that she knew the deceased from the time she and the prisoner had been married. On the 17th March, in the evening, they were both at her house, and went away about eleven o'clock;—they were always very affectionate and very friendly together. About six years ago the prisoner was under the care of a physician, on account of pains in his head, and he was like an idiot. For the last three months they had been all terrified by his manner. He used to make grimaces, and looked wild about the eyes. Witness wished him to be put in confinement, but his wife was so fond of him that she

objected to part with him. On the morning of the 18th of March last, the prisoner came to her house again; he was wringing wet, as though he had been in the water, and he did not appear to have his senses. Shortly afterwards he was taken into custody. When a boy, he had a severe hurt in his head, and was four times attacked in the manner witness had described.

Mr. D —, the surgeon, deposed that he was called to the prisoner's room about nine o'clock on the morning of the 18th, and he found the body of the deceased lying on the bed in a position as though she was asleep; there was a frightful wound on the head, and the skull was completely battered in on the left side—the blow must have caused immediate death. There was a hatchet in the room, with which, no doubt, from its appearance, the wound had been inflicted. Beside the injury to the head, there was another violent blow on the neck which had dislocated it.

It further appeared, that a short time before the prisoner had been taken by his wife to the surgeon, to whom she stated, in his presence, that she was afraid he would commit suicide, and the prisoner said that he had been tempted to it.

Mr. B —, brother-in-law of the deceased, stated that he met the prisoner on the morning of the fatal occurrence. He was very wet, and he made such grimaces and acted in such a manner that witness hardly knew him. He asked him where he had been, and at first he made no answer, and then began to dance about, and said he had been in the water.

The jury stopped the case. Verdict of Not guilty, upon the ground of insanity.

A — S — was indicted for the wilful murder of his mother, J — S —. It appeared that the prisoner's father and mother lived at a place called C —, and the prisoner resided with them, sleeping in the same bed with his father, his mother occupying a little bed by herself. The prisoner had been reading the "Primitive Methodist's Magazine," and complained of his head. He said studying had made him ill, and he was observed to be strange in his manner. At five o'clock the following morning he got out of bed, and went and looked at his mother, who was lying asleep, and then got into bed again. Shortly afterwards he got up, and obtained a poker and a wooden rolling-pin, and with these commenced beating his mother on the head. His father got out of bed and went to his wife's assistance, when the prisoner turned upon him and beat him upon the head until he became insensible. The prisoner then left the house, dressed only in his shirt, which was bloody, and with the rolling-pin, which was covered with blood, in his hand, went to the house of a neighbour named Wardle, and putting his hand through the window, in which he had the rolling-pin, brandished it about, crying out, "I am the murderer." Wardle, alarmed at his appearance, took his gun down to protect himself, and followed the prisoner until he was taken into custody in a public-house, into which he had gone and seated himself in his shirt, talking wildly, and complaining that his arm hurt him. The deceased was found lying upon her bed in a dying state, and his father was found lying moaning in the bed from the injuries he had received. When the prisoner was taken into custody by the police, and asked what he had been doing, he replied, "Nothing." He was then asked when he had last seen his father and mother, and he replied, "Let me consider; I left them this morning bruised." The deceased died before medical assistance could be procured. A *post-mortem* examination established that she had sustained a compound fracture of both the upper and lower jaws, and she was frightfully beaten on various parts of her body, and had, beyond doubt, died from the injuries she had received. For some time afterwards no rational answer could be obtained from the prisoner, who sang ranters' hymns, and talked wildly.

The surgeon of the gaol, who attended him, expressed his opinion that the prisoner had homicidal mania, and that he was not responsible for his actions.

A broken poker was found near the deceased, which had evidently been broken over her by the prisoner. Verdict—Not guilty, on the ground of insanity.

W — C — was indicted for the wilful murder of his mother, A — C —, at R —. This was a painful inquiry, the prisoner being charged with the death of his own mother, by stabbing her with a large knife in her side, the plea being that at the time of committing the offence the prisoner was labouring under insanity. It appeared from the evidence that some years ago the prisoner was engaged on

board a vessel, and whilst so employed he sustained a severe injury of the spine, thus rendering him incapable of working, and causing his mind to be affected. The prisoner occasionally, on any trivial circumstance, became excited, would sometimes strike his mother, but he was not considered to be a dangerous lunatic. The facts of the case were briefly as follows:—The deceased, about noon, left her house to take her husband's dinner, and on her return she found the prisoner and his sister together. The latter remarked to the deceased *that the prisoner's brother had got married at M—*. Upon this the prisoner became greatly agitated and enraged, and the deceased used her endeavours to soothe and render him peaceable, but in vain. He seized hold of a dinner-knife which was on the table, and stabbed his mother in her left side; the unfortunate creature sank upon the floor, and was exhausted from the fatal injury she had sustained. Whilst the poor woman was in this pitiable condition, the prisoner exclaimed, "*I have done for you, you will not live long!*" He then left the house and went to a neighbour's, being at the time without his hat and coat. He there told the dreadful deed he had committed, and asked the persons in the house to go in and see his mother. Two of the neighbours accordingly ran into the dwelling, followed by the prisoner. The deceased was still upon the floor, when the prisoner remarked, "*Aye, she'll soon croak, I've given her plenty!*" adding, that he had stabbed her in the back, and she would not be long. The knife lay upon the floor. The neighbours were afraid of meddling with the prisoner, who went out, first putting on his coat and hat. He sat himself down upon the door-step of a neighbouring house, and shortly after a constable came to him; and upon telling him he had to take him into custody for stabbing his mother, the prisoner observed, "*Yes, I expected you would be coming,*" and he went quietly away with the officer, acknowledging what he had done. The deceased lingered for about a week, and died from the wound she had received.

During the time the surgeon was dressing the wound of the deceased, the prisoner was present; he was much excited, and paced up and down the room, making use of incoherent expressions. Upon the deceased making a dying statement upon oath in the presence of the prisoner, he again conducted himself in the same strange manner as before. The surgeon's evidence was to the effect that in his opinion the prisoner was decidedly insane. Verdict—Not guilty, on the ground of insanity.

J— B—, aged 38 years, was indicted for the wilful murder of S— H—, at C—. The prisoner was a tailor, living with his wife and family at C—, and, until a short time before the commission of the crime with which he was charged, he had always been a peaceable, well-disposed, and respectable man—affectionate to his family, and of a cheerful and happy disposition. *Latterly, however, a change had come over him: he had become much depressed in spirits and reserved in his manners; he no longer took any notice of his children, and said, when he was remonstrated with, that he could not help it. When accosted in the street in a friendly manner by persons considerably his superiors, he made no answer, and on all occasions preserved a sullen silence. This strange behaviour produced at the time the impression that his mind was affected.* The circumstances connected with the commission of the offence were also very strange. The deceased was the second wife of the prisoner's father-in-law, with whom he had always been on very good terms; but about ten o'clock on the morning in question he was seen going into her house, and in a few minutes afterwards she came running out, screaming "*Murder.*" He followed with a poker in his hand, and immediately dealt violent blows upon her head and neck, so that she fell dead. The neighbours came up in a moment, but there was no time to save her, and the prisoner went away. The following evidence shows the state of the prisoner's mind, and that insanity prevailed in his family:—

S— R— stated that she lived in the same street as the deceased; that on the 6th of June she saw the prisoner go into the deceased's house, and in two or three minutes the deceased came out, screaming "*Murder,*" followed by the prisoner. She fell down on the side of her face at the bottom of the steps. The prisoner was holding a poker in one hand, and struck her twice with it on the back of the head while she was on the ground. The prisoner's mother was insane, and one of his sisters had been insane.

Mr. J— S—, a surgeon, was called to support the plea of insanity set up for

the defence, and stated that he had known the prisoner's family for many years. His mother was insane. He stated that he could not form any opinion as to the prisoner's insanity; but restlessness at night is a symptom of it, and so, in his opinion, was his conduct at the time when he committed the offence.

Several other witnesses were called for the prisoner, who corroborated the evidence as to his insanity; among them T— H—, who proved that he had two sisters insane; and Dr. E— P—, a physician experienced in the treatment of lunatics, who had heard all the evidence in the case, expressed a decided opinion of the prisoner's insanity. Verdict—Not guilty, on the ground of insanity.

H— S— was a person belonging to a highly respectable family, aged 26 years, and resided in the house of one R— M—. During the last two months his manner had been noticed as being very strange, and when spoken to his answers were very incoherent.

From the statement of Mr. R—, the counsel for the prosecution, the prisoner had for some time lodged at the house of the deceased woman. He occupied the back, and she the front parlour. Upon the morning of the 7th of June, at half-past five o'clock, Mrs. A— L—, a lodger in the house, was alarmed by screams coming from the deceased's room, and she roused another lodger, A— B—, who immediately rushed downstairs, and there saw the deceased upon her hands and knees upon the third stair, trying to crawl up; she was bleeding from a wound in the throat. The prisoner was standing near her, dressed, and with his hat on; he had an open clasp-knife in his hand, and before B— could interpose, he laid hold of the woman, and again cut her throat. *Prisoner then coolly closed the knife, and in a wild and insane manner said "the great bear had done it," and that "Mrs. M— would be a bear," and other incoherent expressions. In the meantime the poor woman was raised up, and placed in Mrs. L—'s room, while B— went for a policeman and a surgeon; and, upon his return, she was found to be quite dead. Not any motive could be assigned for the commission of the deed.*

Mr. C—, the counsel for the prisoner, stated that he had ample evidence to show the prisoner was a man of unsound mind. He had been a mariner, and received an injury in his head while on ship-board, and from that time down to the present he had been affected in his head. These facts having been deposed to, two medical gentlemen were examined, whose testimony clearly established the prisoner's insanity. Verdict—Not guilty, upon the ground of insanity. •

S— F—, a dressmaker, aged 20 years, a mild-looking and pretty young woman, was indicted for the wilful murder of her illegitimate child, J— C— F—, aged 11 months, at S—. This was a most distressing case. The prisoner had put the child out to nurse with a woman eight weeks ago, and was to pay 2s. 6d. per week for it. She never paid anything for it, and Mrs. L— told her she would no longer keep the child, and she must get another place for it, which she proceeded to do. She took away the child the same day, saying she was going to take it to C—. The child was very weakly and delicate, and Mrs. L— thought more than once that it would die, it was so thin and emaciated. The child was not seen again alive; it was found in a pit containing water, with its frock tied over its head, and two bricks pinned in at the back of its head. It further appeared from the evidence of Mr. W—, surgeon, that the child did not die of drowning, but of a blow at the back of the head, either before or at the same time when it was thrown into the pit. The body was not identified, but two witnesses swore positively to the clothes worn by the child. When apprehended, the prisoner denied the crime; but afterwards, when about to be taken before the coroner, she told the constable that she wished him to let her attorney, Mr. E—, know that he need not attend the inquest, as she was guilty of the crime, and it was no use for her to deny it. All the witnesses, except the surgeon, had known the prisoner for several years, and gave her a high character for kindness and humanity; the woman L— saying, that she was fond of her child—was kind, humane, and respected by every one. It also appeared that the prisoner had been deserted by the father of her child, and that during her pregnancy she suffered from several fits of despondency, and even attempted suicide. It was also proved that insanity prevailed to a considerable extent in her family, her father having died abroad insane, her uncle at

the present time confined in a lunatic asylum, and a sister, who is idiotic. Since her desertion by the father of her child, she had formed a connexion with another man, by whom it was alleged she was pregnant, but which, after an examination by a jury of matrons, was proved not to be the case. The defence set up on behalf of the prisoner was, that the identity of the body was not proved; that the child being weakly, had died in her hands from natural causes, from convulsions or otherwise, and that she had thrown the body into the pit to avoid burying it publicly; or that she might have committed the act imputed to her in a fit of insanity, to which malady her family was subject. Several respectable witnesses gave the prisoner an excellent character.

The learned Judge directed the jury that there was not before them the slightest evidence that the prisoner had committed the act imputed to her when in a fit of temporary insanity. His lordship having recapitulated the evidence, and stated its effects to the jury, left them to say whether in their opinion the evidence brought home the capital charge to the prisoner, and he charged them not to flinch from their duty, but, however painful it might be to them, if they believed her guilty they would say so by their verdict. If they had a reasonable doubt upon the matter, they must give the prisoner the benefit of that doubt.

The jury found the prisoner Guilty, but added a strong recommendation to mercy. The Judge then passed the sentence of death in the usual manner, during which he was affected to tears, and promised to forward the recommendation of the jury to the Queen. The prisoner bore the sentence without any visible emotion.

G—H—S— held the office of postmaster at J— for the last five or six years, and is described as a person of great intellectual attainments, while his hapless wife was highly accomplished, and possessed in her younger days great personal attractions. The accused is 54 years of age, and was placed in the dock before the magistrates at the Guildhall, R—, charged with the wilful murder of his wife by shooting her with a pistol. During the examination he remained perfectly silent, with his face buried in his hands, his elbows resting on the dock, and never once lifting his head to glance round the court. It appeared from the evidence, that on Saturday evening, about six o'clock, the prisoner, accompanied by two females, the one his wife, and the other Mrs. B—, an attendant, drove up to the house of Mr. W—H— in a fly, and took apartments, consisting of a parlour and bed-room, for a week. On Tuesday morning, while Mrs. H— was engaged between seven and eight o'clock in cleaning the hall-door steps, the prisoner came downstairs, and addressing her, said, "Don't drop down dead, Mrs. H—! I have done for my wife; she is an angel!" Mrs. H— asked him if she was dead; upon which he replied, "No; it would be well for her if she was. Send for a surgeon and the police." He then walked into the parlour, and sat down on the sofa, exclaiming, "She is an angel—she is an angel!" A surgeon was immediately sent for; and as soon as Dr. B— arrived, Mrs. H— went to deceased's bed-room with him. They found the deceased lying in the bed, quite quiet, and the clothes were not at all disturbed. She appeared to be asleep. There was no blood at all to be seen on the bed-clothes or pillows. She did not appear to have struggled, or to have been disturbed from her sleep.

C—H—, a constable, took two pistols from under the mattress upon which the deceased lay. The deceased's wounds were bathed for some time, but she died in about a quarter of an hour. The prisoner appears to have been very kind to his wife during the time they were in the house. No report of firearms, either on the preceding night or on the morning of the deceased's death, was heard by Mrs. H— or her husband, although they slept in a room over their heads.

Mr. T—P—B—, surgeon, stated that about half-past seven on Tuesday morning he was sent for to Mrs. H—'s. Upon proceeding to the deceased's bed-room, he found her lying on her right side in bed, and a wound on the left side of her head, from which both brains and blood had oozed. On cleaning the wound, he found that the skull had been perforated to about the size of his little finger. Having removed two small pieces of bone from the margin of the wound, he cleared it, and endeavoured to arouse the deceased; but she was perfectly insensible. Upon searching the room, he found a brace of pistols between the mattress and the bed. One of the pistols was found to be loaded with two balls, incased in a piece of leather, while the other had been but recently discharged, the hammer being

down and the cap split. In a medicine-chest he also discovered a phial containing strychnine, one of the deadliest of poisons. Witness left, and returned again about ten o'clock, when deceased was dead. He subsequently the same morning saw the accused, and conversed with him. He asked witness, "Is she gone?" Witness replied "Yes," and then asked him, "Have you been ill lately, or has there been anything the matter with you?" upon which he said, "It will all come out upon inquiry at H— P—" (a lunatic asylum in which he had been confined). Witness then asked him when he left that asylum, and he answered, "About ten weeks previously." The conversation then dropped. Witness made a *post-mortem* examination of the deceased, and upon examining the head he discovered that the balls had passed through the middle lobe of the left side of the brain to the anterior lobe on the right side, where their course was stopped by the cranium. The two balls produced he found lodged in the anterior lobe of the brain. Death was caused by concussion and an effusion into the brain, the result of a pistol-shot.

J— S—, one of the city police, stated that upon asking Mr. H—, in the presence of the accused, if he heard the report of a pistol that morning, or had any idea when the affair took place, upon Mrs. H— replying in the negative, the prisoner immediately answered, "I have just done it." After being informed by the police that he would be taken into custody for the murder of his wife, he exclaimed, "To murder!" and after a pause said, "There are letters enough to prove all about it."

Mr. W— H—, the husband of Mrs. H—, in corroborating his wife's evidence added, that about twenty minutes before eight on the Tuesday morning he met the prisoner in the passage, when he asked witness if he had sent for a surgeon and the police. Witness asked him what he had been doing, when he answered, "I have been and murdered my wife; she is an angel!" He then said, "I will go for a doctor and police myself;" but witness replied, "No, sir, you shall not go out of my house," and led him into the parlour. The accused then said, "I shall not be hung for it; it will be worse." Neither that morning nor during the night did he hear any quarrelling between the accused and the deceased. He appeared very much attached to her. He did not hear any report of firearms.

The prisoner was asked by the magistrate if he wished to make any statement; but he still held down his head, as he had done all the time of the inquiry, and only replied by a wave of the hand. He was then committed to take his trial at the M— Assizes for the wilful murder of his wife.

Superintendent T— subsequently removed the prisoner to M— Gaol; and during the time he was in custody, that officer stated that he noticed sufficient to satisfy him that the wretched man was at intervals a decided lunatic. That officer stated that he had known the accused for twenty-five years, from his residing in the immediate locality; and in course of general conversation, he understood, from several rambling statements, that his intention was to have committed self-destruction, when the idea rushed to his mind of murdering his wife. It appears that, from being in affluent, and indeed wealthy circumstances, the poor fellow was very much reduced, and as a last resource procured, through his wife's instrumentality, the postmastership of J—. He frequently betrayed aberration of intellect, and had been out of H—'s A— only a few months. During the past six weeks, having obtained leave of absence from his duties, he had been travelling about for the benefit of his health. He had, before proceeding to R—, resided a week at G—. He was a well educated and talented man, having, before he accepted the office of postmaster, followed the profession of instructing young gentlemen preparatory to their entrance into the universities.

I— T— was indicted for the wilful murder of M— A— T—, at B—. The following are the facts of the case as they appeared on the trial. The prisoner entered the service of a Mr. T—, who resided at S—, in order principally to wait upon his wife, who was ill, and also to take care of the child in question, which was about 13 months old. The prisoner, however, continued only a short time, and the way she left was as follows:—Something unpleasant having occurred respecting the child's clothes, Mrs. T—, her mistress, remonstrated with her on the subject, but nothing more occurred. However, on the following day the prisoner having been sent on an errand, took the child with her, and from the moment she left up to the time of the murder neither the prisoner

nor the child was ever heard of, and at that time it was the 19th of December, when she was traced in company with a man named W—, in a lodging-house at B— W—; but before intelligence reached the authorities, they had left the town, and nothing more was known of their whereabouts until the beginning of January, when, in a state of misery and destitution, she applied to the relieving officer of B— A— for relief, when both she and the child were sent to B— A— workhouse. Upon applying to the officer for relief, she said her name was I— M—, and that she had come from L—, and the father of the child was dead. When taken to the workhouse, the child had a black eye, which the prisoner said was caused by a fall, or by falling from her knee, and that it was only eleven months old. It had no other marks than a black eye, and the prisoner gave various accounts how it was done. She first said she let it fall as she was coming from Darlington; then, that one night when she went out, she gave the child to her husband, and that when she returned and took the child she saw no black eye until the following morning. There were also some marks on the child's back, which she said were done by the father beating it. On the 4th of June, the prisoner went into a room to one of the inmates, and said they must go directly to the child, as it was in a fit. Upon two of the inmates going into the room, the prisoner had the child upon her knee beside the bed. The child made no noise. Mr. H—, the surgeon was sent for, who examined the child. There were no marks of violence on the child then, and it was put to bed with the prisoner. The prisoner had placed the child upon the cold floor; and upon the surgeon telling her it should not be there, she took it up and flung it upon the bed. About eleven o'clock the same night, A— H—, one of the inmates, went into the prisoner's room; none but the prisoner was there, and she said the child was dying. The surgeon ordered that some persons should sit up with the child all night, but the prisoner said there was no call for that. Upon again inquiring how the child was, the prisoner said, "Nicely." Witness went to breakfast, and upon her return to the room at nine o'clock, she found the prisoner sitting by the bedside with the child upon her knee. Its head was covered with a shawl, which being taken away, the prisoner said the child was dead; the child was taken from her, and upon its being washed, a desperate bruise at the back of the head and a long cut in the forehead were discovered; and on a stone mantel-piece which was in the prisoner's room were marks of blood—and it appeared that the prisoner had dashed the child's head against the mantel-piece, which caused its death. There was blood also on the hearthstone and the boards. Upon being asked how the child's head became bruised, prisoner said it had knocked its head against the bedside—it was an iron bedstead. It also appeared that after the child was dead, the prisoner kept it on her knees as she would a living one. The prisoner said her name was I— M—, also I— T—; that the child was her own, but that they called the father M—. Upon a *post-mortem* examination, it appeared there were marks and bruises on the right cheek and body of the child, beside those on its forehead; the side of the head and face were swollen and of a dark livid colour, and there was a fracture near the right side, near the temple. Beneath the scalp was a quantity of extravasated blood, and an extensive fracture on the left side, from the ear to the top of the head. The fracture of the head, together with the extravasated blood, were the cause of death. It would require several blows to cause the fractures, and it was not possible for the child to have done them.

A brother of the prisoner proved that for several years her conduct and demeanour had been such as to leave no doubt on their minds that she was a girl of weak mind, and approaching almost to idiocy.

The Judge, in summing up the evidence, commenting as he proceeded, concluded by remarking that the entire transactions in connexion with the prisoner's life and conduct were certainly uncommonly singular for a person of sound intellect. Verdict—Not guilty, on the ground of insanity.

J— G— was indicted for the wilful murder of R— G—, his child, 15 months old. From the evidence, it appeared that the prisoner had lived apart from his wife. She had four children, the youngest of which was the above-named R—. About nine o'clock in the morning, he was seen to go into his wife's house by a woman living next door, who stated that, seeing the prisoner at his

wife's house, and hearing a groan, she went in. The prisoner was sitting on a sofa, pulling on his boots, and his wife said, "He has cut my child's throat in bed." Another witness also stated that she heard prisoner's wife say, "He has murdered my child," and who, seeing the prisoner walking quietly down the yard, asked him what he had done, and he replied, "The child is in heaven, and I want to be above as well."

S—, a constable, proved that in taking the prisoner's razor from him, he pointed to one which had blood on it, and said, "*That is the one that did the job, and I believe the Lord ordered me to do it.*" Seven witnesses were examined as to the state of the prisoner's mind, some of whom stated that the disease had manifested itself in other members of his family. To rebut this evidence, five other witnesses were called—viz., the surgeon of the gaol, the governor of the gaol, the police superintendent, the coroner, and another person, all of whom gave evidence in contradiction of the existence of insanity in the prisoner.—Verdict of Not guilty, on the ground of insanity.

Side by side with these distressing cases of fatal suicidal and homicidal mania under the influence of unrecognised and neglected disorder of the psychical functions of the brain, we could place a number of illustrations which have come under our own observation, in which medical treatment *directed to the morbid state of this organ has been followed by the happiest curative results.*

Cases of severe mental despondency and distress—instances of alienation of mind, associated with hallucinations and with apparently chronic and fixed delusions, accompanied by strong suicidal and homicidal feelings—have all yielded to medical treatment, and thus, persons in all grades of life, who, if these conditions had not been fully appreciated, would have fallen victims to their own insane impulses, have been restored to society in a state of mental health. We are fully cognisant of the difficulty of persuading persons inexperienced in these matters, of the importance of attending to the earliest indications of brain and mind disorder. The symptoms which so generally precede the act of suicide—such as depressed spirits, distress of mind, needless alarms and apprehensions as to some foreboding evil, great irritability of temper, and inability to attend to the ordinary occupations of life—excitability, headache, disturbed or sleepless nights, morbidly exaggerated views of the actual ills and circumstances of life—are, *in many cases well-marked signs of acute disorder of the brain, requiring for its treatment the most prompt and energetic treatment.* This type of mental disease is fraught with much more danger to life, and is more frequently associated with the suicidal inclination, than those states of morbid mind connected with paroxysms of mental excitement and maniacal violence.

We must, for the present, remain satisfied with having discharged an important professional duty by directing public attention to this subject. Let our readers look well to the facts previously recorded, and ask themselves the question, whether, if the brain and mental condition of these unhappy suicides had at an early period been recognised and treated, nearly all would not have escaped from a horrible self-sacrifice?

ART. II.—THE DEMON OF SOCRATES.*

THE glory was departing from Athens. Above a thousand years had elapsed since its foundation; it had passed through all gradations, from a condition of barbarism, when its heroes were little better than skin-clad freebooters, to one of refinement, which made it the centre of the civilized world. It had most powerfully influenced the destinies of Greece, by successfully opposing almost single-handed the entire power of Xerxes; and its military renown had culminated in the immortal victories of MARATHON, SALAMIS, and PLATÆA. The pride, the arrogance which manifested themselves after these great events, stirred up against it the other States of Greece, and determined them to its destruction. But far worse than external enemies were those that arose within. Enervating luxury and brutal intemperance gradually invaded all ranks of society, and a general demoralization was the result. Then ensued that certain sign of decaying power, or of a State shaken to its very foundations, that prelude to its fall—rapid changes of forms of government, from rabid democracy to oligarchy and despotism.

Yet, menaced as she was both from within and without, Athens was still, and long continued to be, the favoured seat of learning and the arts. In the period to which we allude (about the fifth century B.C.), she numbered amongst her celebrated sons such intellectual giants as PERICLES, PHIDIAS, ESCHYLUS, SOPHOCLES, EURIPIDES, ARISTOPHANES, SOCRATES, XENOPHON, and PLATO. It is curious and interesting to analyze the elements of civilization in times which could produce great intellects like these. Personally, a superficial refinement of manner barely professed to conceal a gross licentious immorality, assuming forms which forbid even a faint allusion in these times—publicly, the most shameless undisguised venality characterised their courts, misnamed, of justice. In their external relations, the wars, undertaken on the slightest pretexts, were wars of extermination—the cities were destroyed, and the inhabitants killed or enslaved. Occasionally even yet, the favour of the gods was propitiated by human sacrifices. On the morning of the battle of Platæa, Aristides sent to Themistocles three nephews of Xerxes, whom he had taken prisoners; and, by the advice of an augur, they were sacrificed to Bacchus, to purchase his favour. Thus, although the Greeks were no longer anthropophagi, their gods were.† The thousands of deities that were admitted, and in some sort worshipped, were but the coarsest embodiments of human pas-

* "Du Démon de Socrate," par L. F. Lélut, Membre de l'Institut. Paris, 1856.

† Lélut.

sions—drunken, gluttonous, indecent creations, half despised and half feared by their votaries—somewhat more powerful than men, but susceptible of being duped by them; and equally with them subject to an unalterable, irrevocable fatality. But, as a contrast or background to the portrait of Socrates, and a sketch of his teaching, nothing can be more effective than a statement of the condition of what was called philosophy before his day. Now that exact science has made at least some progress in the world—now that facts are in some measure recognised as necessary elements in theorizing—now that observation, at least so far as science is concerned, is allowed to be a necessary preliminary to dogmatism—it is scarcely possible for the mind to realize or credit the futile nature of the questions which occupied the acutest minds; or the arbitrary, wordy, windy, unreasoning manner in which they were settled by one school, or unsettled by another. Now that the majority of men recognise a material and an immaterial nature, it is difficult to picture the chaotic ideas held on the subject of the universe, its origin, its nature, its laws.

“All the philosophers,” says Mr. Grote,* “of the fifth century B.C., prior to Socrates, inheriting from their earliest poetical predecessors the vast and unmeasured problems which had once been solved by the supposition of divine or superhuman agents, contemplated the world physical and moral, all in a mass; and applied their minds to find some hypothesis which would give them an explanation of this totality, or at least appease curiosity by something which *looked like* an explanation. What were the elements out of which sensible things were made? What was the initial cause or principle of those changes which appeared to our senses? What was change? was it generation of something integrally new, and destruction of something pre-existent—or was it a decomposition and re-combination of elements still continuing?”

Others were occupied in demonstrating the impossibility of change or motion. Parmenides denied that change of either colour or form could take place. Zeno† showed by logic that motion was impossible, a proposition supported strongly by Melissus and many others; they upheld likewise the unity of matter, that the real ultra-phenomenal substance was One, unchangeable and undivisible; whilst their opponents maintained that it was not One but Many, divisible, moveable, and changeable. These, and other equally urgent matters, occupied the minds of all thinking men. Observation and induction seem to have been unknown or practically ignored; with the exception of some few discoveries in astronomy and mathematics, science was in complete infancy; physical science was represented only by such theorists as Thales, Leucippus, Democritus, and Empe-

* “Hist. of Greece,” vol. viii.

† Not Zeno the Epicurean, but Zeno of Elea.

docles, reasoning vaguely upon air, water, fire, atoms, and their combinations, by means of Friendship or Enmity, as causes of motion or change. A complete bar also to progress in observation was the opinion so generally held, that the senses were delusive, and not to be trusted in any matter. Gorgias professes to demonstrate "that nothing exists; that if anything exist, it is unknowable; and granting it even to exist, and to be knowable by any one man, he could never communicate it to others." (Grote, p. 503.) It may be questioned whether some of the ontological doctrines of our own times are much more explanatory. Cicero, in his *Academic Questions*, gives a brief summary of the cosmogonic systems of this age, fully illustrating the entire ignorance of natural science which prevailed, and the tendency to rest in forms of words.

"Is (Thales) enim infinitatem naturæ dixit esse, ex qua omnia gignerentur. Post ejus auditor Anaximenes, infinitum æera, sed ea, quæ ex eo orientur, definita; gigni autem terram, aquam, ignem, tum ex his omnia. Anaxagoras materiam infinitam, sed eas particulas similes inter se, minutas; eas primum confusas, postea in ordinem adductas mente divina. Xenophanes, unum esse omnia, neque id esse mutabile. Parmenides, ignem, qui moveat terram, quæ ab eo formatur, Leucippus, plenum et inane.—Pythagorei ex numeris et mathematicorum initiis proficisci volunt omnia."

Content thus to remain bound up in forms of words without meaning, debarred from further progress by the legitimate way of observation by distrust of the senses, because these revealed to them phenomena which would not be thus formulated, philosophers degenerated into mere sceptics, doubting nature, doubting themselves, doubting their gods. "Respecting the gods," says Protagoras, "I neither know whether they exist, nor what are their attributes; the uncertainty of the subject, the shortness of human life, and many other causes, debar me from this knowledge." Philosophy, it was evident, must receive some new impulse, be diverted into new channels, or it must perish. This impulse was not long wanting. In the workshop of Sophroniscus, a sculptor, was a youth, who was destined to introduce a new philosophy, new morals, new manners, and almost a new religion; and all this without any formal teaching, without professing any code of opinions, without forming any school. His one weapon, with which he warred against the vices, the scepticisms, the obstinacy, and the self-conceit of the world and the sophists, was the great negative arm of Grecian analysis, the cross-examining Elenchus. It may almost be said to have been created or invented by Socrates (although Zeno* seemed to be in some

* Of Elea.

measure acquainted with its value); it may truly be said to have perished with him.

“Where are we to look for a parallel to Socrates, either in or out of the Grecian world? The cross-examining Elenchus, which he not only first struck out, but wielded with such matchless effect and to such noble purposes, has been mute ever since his last conversation in the prison; for even his great successor Plato was a writer and lecturer, not a colloquial dialectician. No man has ever been found strong enough to bend his bow, much less sure enough to use it as he did. His life remains as the only evidence—but a very satisfactory evidence—how much can be done by this sort of intelligent interrogation; how powerful is the interest which it can be made to inspire; how energetic the stimulus which it can apply in awakening dormant reason, and generating new mental power.”*

Simple, unostentatious, and temperate, amid the luxuries and temptations of the most luxurious city in the world—pure among the most impure—virtuous amongst the most venal—clear-sighted to see through the sophisms and verbiage which overlaid and swamped all thought—he devoted all the energies of his hardy nature, all the tendencies of a long life, to the practice and inculcation of virtue. St. Augustine says of him, that he was the first who, leaving celestial matters as too obscure or abstruse to be penetrated by man, reduced philosophy to the reformation of manners; and Cicero says,† *Socrates autem primus philosophiam devocavit à cœlo, et in urbibus collocavit, et in domos etiam introduxit, et coegit de vitâ, et moribus, rebusque bonis, et malis quærere*. Forsaking as either unworthy or impossible of solution the questions which hitherto had been supposed to constitute philosophy; as to the One or the Many—motion, divisibility or stability of matter, change or permanency, &c.; he continually turned his investigations and the thoughts of his interlocutors to *human* affairs. What is good? What is beautiful? What is just or unjust? What are temperance, courage, cowardice? What is a city, and what a citizen? What is piety? Such were the questions with which he was ever occupied, leading his fellow-citizens to the comprehension of the great truths involved in them; whilst in his own person he afforded a bright and consistent example of all the virtues which he taught. Stern rebuker of vice—uncompromising enemy to injustice, even in high places—living reproach to impurity—terrible enemy to the darkening of counsel by words without knowledge,—he was found too far, morally and intellectually, in advance of his countrymen to be tolerated by them, and they put him to death. But it remained for the wisdom of the nineteenth century to make the great and

* Grote's “Hist. of Greece,” vol. viii., p. 664.

† “Tusc. Quæst.,” lib. v.

somewhat startling discovery that Socrates was A MADMAN ! That we may not be liable to the imputation of misrepresentation, we quote literally from M. Lélut's recent work the following passage :—

“ Reste une troisième et dernière opinion . . . et cette opinion, qui consiste à dire que Socrate était un théosophe, un visionnaire, et pour dire le mot, UN FOU—cette opinion est la seule vraie.”

This opinion is founded upon the contested point of the demon or familiar spirit of Socrates ; M. Lélut considering it as an hallucination of hearing, and perhaps of sight also ; and thus arriving at the conclusion that Socrates was of unsound mind. A brief sketch of his life and character is necessary as a preliminary to the examination of this point.

Socrates was born about the year 469 B. C. His father was Sophroniscus, the sculptor, and his mother Phanarete, a midwife. Of his childhood little or nothing is known, except that his father was advised by an oracle to leave the child to his own natural instincts, as he had within himself a guide worth a thousand teachers. Notwithstanding this, he was brought up to his father's profession, for which he had little vocation ; and, according to Diogenes Laertius, might often have been observed, chisel in hand, lost in thought, arrested in his uncongenial but necessary toil by some vein of philosophic inquiry. He made some progress in the art of sculpture ; and as late as the time of Pausanias, a group of his workmanship was to be seen at the entry of the citadel of Athens. From the necessity for manual labour he was at last released by the generosity of Crito, at what period of life does not appear.* At first he seems to have pursued the ordinary curriculum of study, including the physical sciences of that time, with geometry, music, and the art of oratory : he soon, however, concluded that these studies were either useless, or shrouded in impenetrable darkness ; and thenceforth he devoted himself entirely to the study of morals, and of the duties of men and citizens.

“ These efforts,” says M. Lélut, “ of renovating moral philosophy were not made from a professorial chair, nor in a place set apart for tuition, nor at set times, in the intervals of which he thought of other things. They were made in all places, at all times—in Athens, as with the army—in the street, as at the dining-table—in the workshops of artisans, as in the boudoir of Callisto or of Theodote.”

In the street, the forum, the baths, the gymnasium—wherever the people, particularly the youth, were congregated, there was Socrates with his never-ending questions. Of the origin, reasons, and method of this system of interrogation, he himself gives an account in his *Apology* as related by Plato. It appears that a friend of his, named Chærepho, being at Delphi, ventured to

* Most probably when about nineteen years of age.

inquire of the oracle who was the wisest man, and received for answer that none was wiser than Socrates.

"I reasoned thus with myself: What does the god mean? what is the enigma? For I am not conscious that I am wise, either much or little. . . . Afterwards, with considerable difficulty, I had recourse to the following method of searching out his meaning."

He then describes how he went to one of the greatest politicians of the day and questioned him, and how he found that he was only wise in the opinions of others and in his own, but not really so.

"I thereupon endeavoured to show him that he fancied himself to be wise, but was not really so. Hence I became odious, both to him and many others who were present. When I left him, I reasoned thus with myself: I am wiser than this man, for neither of us appear to know anything great or good; but he fancies he knows something, although he knows nothing; whereas I, as I do not know anything, so I do not fancy I do. In this trifling particular, then, I appear to be wiser than he."

His researches amongst all classes of the learned led him to the same conclusion—he everywhere found that he was making himself odious by exposing ignorance and pretence; but feeling that to elucidate the meaning of the oracle was of paramount importance, he continued the same course of interrogation.

"At last, therefore, I went to the artisans. For I was conscious to myself that I knew scarcely anything, but I was sure that I should find them possessed of much beautiful knowledge. And in this I was not deceived; for they knew things which I did not, and in this respect they were wiser than I. But, O Athenians, even the best workmen appeared to me to have fallen into the same error as the poets; for each, because he excelled in the practice of his art, thought that he was very wise in other most important matters; and this mistake of theirs obscured the wisdom that they really possessed. I therefore asked myself, in behalf of the oracle, whether I should prefer to continue as I am, possessing none either of their wisdom or their ignorance, or to have both, as they have. I answered therefore to myself and to the oracle, that it was better for me to continue as I am."

His general conclusion is, that all being alike ignorant of any real wisdom, human knowledge being of little worth, he only can be wiser than his fellows who is aware of this ignorance.

"Still, therefore, I go about and search and inquire into these things, in obedience to the god, both among citizens and strangers, if I think any one of them is wise; and when he appears to me not to be so, I take the part of the god, and show him that he is not wise."

It is related that when Sir H. Davy was making his great researches into the constitution of the earths and alkalies, some of the chemical professors felt greatly aggrieved at having their

previous notions disturbed. A noted professor at a Scotch university refused all recognition of these researches, as long as he decently could do so. When ultimately compelled to make some allusion to them, he did it very briefly, accompanying it with the opinion that Mr. Davy was "a very tiresome person." Such in an eminent degree must have been the judgment of many of the Athenians with reference to Socrates. All those who, under the pressure of his *Elenchus* were reduced to silence, palpable contradictions, or tacit confessions of ignorance, would be inclined to view him with little favour. Those who winced under his crushing irony—those whose vices he lashed so unsparingly—those whose secret souls he laid bare for their own inspection and appreciation—all would hate him much more than they would despise themselves. A notorious instance occurred in the person of Critias, who at one time was a constant follower of Socrates. Having spoken earnestly to Critias on the subject of one of the vices then fashionable, and he having paid no attention to his remonstrances, λέγεται τον Σωκρατην, αλλων τε πολλων παροντων και του Ευθυδημου, ειπειν, οτι υϊκον (τι) αυτω δοκοιη ο Κριτίας, επιθυμων Ευθυδημου προσκνησθαι, ωσπερ τα υϊδια τοις λιθοις. An eminently disagreeable person must Critias have thought Socrates; and he did not forget it.

The remarks made by our great English satirist upon Swift would have been very applicable to Critias:—"If undeterred by his great reputation you had met him like a man, he would have quailed before you, and not had the pluck to reply; and gone home, and years after written a foul epigram about you—watched for you in a sewer, and come to assail you with a coward's blow and a dirty bludgeon." For years afterwards, when he had long left the society of Socrates, and was one of the Thirty Tyrants, he remembered his sarcasm, and not knowing how to find matter of accusation against Socrates individually, so pure and blameless was his life, he inserted in the laws that "none should teach the art of disputation," and took every opportunity of using his power to annoy him.—Polus, a pert, loquacious young man, who had put himself forward to answer Socrates in the place of Gorgias the rhetorician, went away smarting under his irony, and doubtless thinking him very objectionable.

"*Socr.* Most excellent Polus! we get ourselves friends and sons for this express purpose, that when we, through being advanced in years, fall into error, you that are younger being with us may correct our life both in deeds and words. If, then, Gorgias and I have fallen into any error in our arguments, do you who are present correct us; you ought to do so. And I wish that if any of the things that have been granted appear to you to have been improperly granted, you would retract whatever you please; only I beg you beware of one thing.

"*Pol.* What is that?

"*Socr.* That you would restrain that prolixity of speech which at first you attempted to employ.

"*Pol.* What? shall I not be allowed to speak as much as I please?

"*Socr.* You would indeed be very badly treated, my excellent friend, if, having come to Athens, where of all Greece there is the greatest liberty of speech, you alone should here be deprived of this liberty. But set this against it; if you speak in a prolix manner, and will not answer a question put to you, shall I not be badly treated if I am not allowed to go away and not listen to you?"

But leaving for the present the method and matter of the teaching of Socrates, it is time to inquire into the grounds upon which M. Lélut considers it right to class him amongst madmen.

His persuasion of a special religious mission was one of the leading peculiarities in the character of Socrates. This is more than once alluded to in his defence before his judges. "This duty," he says, alluding to his mission to cross-examine his fellow-citizens upon points of virtue and piety, "has been enjoined me by the Deity, by oracles, by dreams, and by every mode by which any other divine decree has ever enjoined anything to man to do." And again:—

"Perhaps, however, it may appear absurd that I, going about, thus advise you in private, and make myself busy, but never venture to present myself in public before your assemblies, and give advice to the city. The cause of this is that which you have often and in many places heard me mention: because I am moved by a *certain divine and spiritual influence*, which also Melitus, through mocking, has set out in the indictment. This began with me from childhood, being a *kind of voice* which, when present, always diverts me from what I am about to do, but *never* urges me on. This it is which opposed my meddling in politics; and it appears to me to have opposed me very properly."

In this and passages of similar import are to be found the entire elements of this allegation. Socrates was constantly in the habit of expressing himself as moved and influenced by the god, ο θεος; by a divine or spiritual influence—το δαιμονιον—or το δαιμονιον σημειον—translated by some substantively as the DEMON, and the sign of the Demon; by a voice—φωνη—checking him, but never urging him on.

There are three modes of interpretation of these forms of expression—three hypotheses to account for the facts. The first is, that Socrates used these words to express, figuratively and forcibly, the motions of conscience. The second is, that it was a system of deceit practised by him to increase his power over the minds of his hearers, and propagated by his followers to add to the dignity of their master, as having been under immediate Divine guidance.

The third opinion is the one adopted or suggested by M. Lélut, that Socrates was subject to hallucinations of hearing—

perhaps also of sight; that he was therefore a visionary—a madman!

We will briefly trace the arguments and considerations relative to the psychological history of Socrates, by which M. Lélut endeavours to support this view. He introduces the subject thus:—

“Since Plato and Xenophon, all the writers who have examined with any precision the thoughts and acts of Socrates, have united, under the generic title of *DEMON*, or Familiar Spirit, all that part of those thoughts and acts relative to the singularities of his life, which is beyond the common course. I mean his inspirations, his presentiments, his prophecies, and especially that divine voice which he heard, or said that he heard; which impelled him to no action, but deterred him from many which might have been unjust or dangerous; a voice which enabled him at many times to give to his friends and disciples counsels, which they always found good to follow, and dangerous to neglect.

“In recognising and exalting the purity and sublimity of his life, the admirable consecutiveness of his thoughts and actions, all writers have remarked something extraordinary and eccentric in this life exclusively consecrated to the triumph of one or two ideas, and to the accomplishment of the same design. . . . Not only was he a *singular* youth, but he had been a singular child—of a meditative spirit doubtless; of great capacity; but assuredly of an equally great peculiarity: of this no further proof is needed than the counsel of the Oracle to leave him to his own natural instincts, and his own confession that from a child he had felt the influence of the *genius* in question.

“Socrates, then, had from his earliest years a *singularity* (I lay stress upon the word) which his mature age was not to belie. Was he not in reality a singular man, this Socrates, clothed in the same mantle in all weathers and seasons—walking barefoot upon the ice as upon the parched and heated soil of Greece—dancing and leaping, often alone, by fits and starts—leading, in the eyes of the vulgar, the most eccentric life—having no other occupation than to pervade the public places and the workshops of the artisans—pursuing every one with his questions and his irony—receiving nothing from friends or disciples, yet asking them for a coat when necessary—acquiring, in fine, by his conduct and manners, such a reputation for eccentricity, that he was afterwards surnamed by Zeno the Epicurean, as Cicero relates, *Atticus scurra*, the buffoon of Athens—what we should now call an original?

“Notwithstanding these things, the Oracle of Delphi, when consulted by Charepho as to who was the wisest man of Greece, replied—Sophocles is wise, Euripides is wiser, but Socrates is wisest of men. Thereupon Socrates, who wished to understand the meaning of this, commenced amongst all professions in Athens that singular course of interrogations, which by demonstrating the ignorance of those who were accounted wise, drew upon him the hatred of so many.

“Psychologically speaking, the matter might have rested there, and he have been only accounted a singular and extraordinary man, if he

had not from his infancy been disposed to take the inspirations of his conscience for the voice of a supernatural agent. This thought, too lively, too ardent, too much disposed to *transfer itself to the exterior*, to clothe itself with personality, to become an image, or at least an audible voice, took in effect this last form ; and then commenced all at once the *hallucinations* of Socrates—that is to say, the most undeniable form of alienation (*l'espèce de folie la plus irréfutable*)."

M. Lélut considers the actual insanity of Socrates to have commenced at the siege of Potidæa, where he served with distinction as an oplite, and where he had a fit of abstraction, which appeared like an ecstasy or trance. We find an account of this given by Alcibiades in the "Banquet," which it may be well to give entire :—

"But what this patient man did do and dare during the campaign there, it is worth while to hear. For while he was thinking of some question for himself, he stood from the dawn investigating it ; and as he did not succeed, he did not desist, but stood still investigating it. It was mid-day, and some persons perceived him, and wondering said that Socrates had been standing from the morning thinking upon something. At length some Ionian soldiers, when it was evening, having supped—for it was then summer—brought out their ground-litters, and partly slept in the cold, and partly kept watch, whether he would stand there all night. And he did stand until the dawn appeared and the sun rose ; after which he departed, having first offered a prayer to the sun."

In commenting upon this relation, M. Lélut observes that we must either deny the facts, or "recognise in them the commencement of a condition which no one would voluntarily experience, even to possess all the virtue and all the glory of the son of Sophroniscus." Not to interfere with the general course of the argument, we would merely suggest that this does not appear to us an exhaustive view of the subject, but that recognising the facts, we need not attach so serious an import to them. It is not impossible that he who had turned his back upon an old, worn-out, effete system of philosophy, and who out of the depths of his own thought had eliminated the great truths of the immortality of the soul, and the certainty of a future state of rewards and punishments,—who from a chaotic Polytheism had arrived at the belief in ONE GOD, the CREATOR and upholder of all things,—it is not impossible that such a man may have been so wrapt and lost in the opening immensity and profundity of these considerations, as to become insensible to surrounding objects for even so long a time as is here mentioned. Archimedes and Newton were not suspected of madness because of their frequent and prolonged reveries ; and their problems yield in vastness to those that engaged this colossal mind.

M. Lélut relates one or two other instances of his reveries, or, as he would style them, ecstasies ; and then proceeds to quote from the "Dialogues of Plato" most of the passages where Socrates speaks of himself as influenced by the god (ο θεος), the demon (το δαιμονιον), or the voice (η φωνη). Some of them are certainly remarkable. In the "Philebus," Socrates uses this expression :—

"At the moment of passing the water, I felt the divine signal (το δαιμονιον σημειον), which is familiar to me, and the presence of which always arrests me at the moment of action. I seemed to hear a voice which forbid me to cross." This would, *so far*, appear to argue a belief in some personality ; but an examination of the following remark modifies this impression much. "Such as you see me, I am a diviner (ειμι δη μαντις μεν)—not a very able one, truly ; I resemble those whose writing is only legible to themselves—I know enough for my own purposes. *The human soul has a prophetic power.*" Here the same powers are spoken of as personal—not as communicated from without.

Some of the most remarkable passages, however, are those in which Socrates speaks of his influence over his pupils, in which some mysticism may readily be discovered by those engaged in the search after it. In the "Theages," Socrates relates a conversation of his own with Aristides, the son of Lysimachus, by way of illustrating this influence. He represents Aristides as saying :—

"I am going to relate a thing which might appear incredible, but which is nevertheless true. I have never learnt anything from you, as you very well know. And yet, when with you, even in the same house, though not in the same room, I have always profited in wisdom ; when in the same room, I have advanced more rapidly still ; but most of all when, being in the same room, I had my eyes fixed upon yours ; or most especially if I sat near you and touched you."

Socrates then continues :—

"Such, dear Theages, is the commerce that one may have with me. *If it please the god* (τω θεω), you will, by being near me, profit much, and in little time ; but *if not*, your efforts will be in vain. Consider then whether it will not be more advantageous to you to attach yourself to some master who will certainly be useful to you, rather than to follow one who cannot answer for anything."

M. Lélut remarks upon this :—

"I cannot refrain from pointing out how strange in their nature and development, how truly maniacal (*veritablement maniaque*) in principle, are the beliefs and pretensions announced in the last passage. Here is Socrates, who not only imagines that he receives divine influences and inspirations, and hears a divine voice ; but who, by reason of this

privilege, believes that he possesses a similar influence, even at a distance, upon his friends, his disciples, and even strangers; an influence independent of word or look, exerting itself even through walls. In truth, it is impossible to hear or see anything more extravagant or more characteristic of madness; et les hallucinés, qui, sous nos yeux, prétendent envoyer ou recevoir à distance des influences physiques, magnétiques, franc-maçoniques, ne s'expriment pas autrement que Socrate, et ne sont, sous ce rapport, *pas plus fous qu'il ne l'était.*"*

M. Lélut then passes on to comment upon the expressions used by Socrates in his defence, with reference to the divine influence under which he acted; and he is of opinion that these develop, in the most formal manner, as obvious and inveterate hallucinations of hearing as were ever observed by a physician. The passages are too long to cite textually. In the "Apology," Socrates repeatedly uses all the forms already quoted—professing in all matters to *act* under the immediate influence, guidance, and direction of the divinity (του θεου), which, be it remarked, is attended by no voice; but *to be restrained from action* by the voice, or Demon—the φωνη, or δαιμονιον σημειον. He tells the Athenians that he has pursued the course of life which they so reprobate, influenced by the god, through the medium of dreams, oracles, &c. He tells them that he has *refrained* from preparing a defence, because the Voice prevented him. Upon all this M. Lélut puts the same literal interpretation as before noticed.

In the determination to represent Socrates as the victim of hallucinations, he extends them from the ear to the eye, and insists that Socrates *saw* his Demon as well as heard it—though he himself emphatically disclaims such a vision, and moreover disputes its possibility. He says that there are gods, who preside over the well-being of men, but that only their works are visible in results; and that neither they themselves nor their immediate agents (as the thunderbolt) are visible or palpable at any time. ("Memorabilia," lib. iv.) Yet on the strength of a vague conjecture of Apuleius, M. Lélut says he has no doubt that the eye was subject to a corresponding hallucination with the ear; and an equally unsatisfactory testimony states that the sense of touch was similarly affected. In his general summary he says:—

"Socrates had ecstasies, almost accessions of catalepsy, as happened to him at the siege of Potidæus, and elsewhere. Soon these ecstasies assumed the character of more definite hallucinations, shorter, but more frequent; hallucinations of the general tact or sensibility internal or external; hallucinations especially of hearing, and most probably of vision. Nothing assuredly can be more extraordinary; but, at the

* In this and some other passages we prefer giving the original, for the obvious reason that a translation would scarcely be credited.

same time, nothing can be more irrefragable as a criterion of insanity than these hallucinations."

Socrates had undoubtedly some faith in dreams of a certain character—he spoke in mysterious phraseology also of the prophetic powers of the spirit of man. From all these considerations combined, M. Lélut concludes that *Socrates was insane*.

It is undoubtedly true that there are many hitherto "unrecognised forms of insanity," developing themselves in peculiarities and changes of temper, habits, general disposition, morals, and the like. But it appears to us to be a retrograde step, and one likely to throw discredit upon psychological inquiry, and to subvert all useful generalization, to look for marks of insanity in a close adhesion to the modes of belief of any particular age and country, a poetical or figurative mode of expression, and a habit of reverie—to see mental aberration in slight eccentricities of conduct, in defiance of the evidence of a long life characterized by the acutest and most comprehensive intelligence that perhaps ever adorned man; a purity and blamelessness of life and manners which not even his bitterest enemies could impeach; and a death such as might well have crowned, and added new lustre to, the life of the greatest of ancient philosophers. Such a verdict is only equalled by that passed by the same authority on the great Pascal, who is pronounced to have been hallucinated, and *thus* insane, on the strength of a parchment found after his death, sewed within his doublet, on which were written some rather unconnected mysticisms, which may *possibly* be interpreted to have reference to some supposed vision.*

When analysed, the evidence upon which Socrates is here pronounced insane may be considered under these heads:—(1) His belief in a special divine mission; (2) his frequent references to a spiritual monitor or Voice, called by some his Demon or Genius; (3) his reveries or ecstasies; (4) his belief in dreams; (5) his belief in, and claims of possessing, a prophetic power; and (6) certain eccentricities of habit and manner.

1. Socrates was in the constant habit of expressing himself as acting under the direct influence and impulse of the god. He was so far in advance of the great majority, if not all, of his countrymen, as to recognise one Supreme Power, who was not a practical nonentity in the world, but a Creator and an upholder, and who exercised a paternal care over his creatures. As a *stimulus to action* he always recognised this power, piously acknowledging that all ability and all disposition to action came from this source. When Aristodemus inquired into the nature of this influence, he advised him to pay special and assiduous court to the gods, that

* "L'Amulette de Pascal." Par F. Lélut. 1846.

they may exert a similar one over him : thus, in this instance, at least, disclaiming any peculiar theurgic manifestation.

2. The case is somewhat different with regard to the especial monitor or Voice, to which he so constantly alludes. Though acknowledging one Supreme Power, he did not entirely forsake the Polytheism of his country ; but believed in certain inferior orders of spirits, called Demons, who were the immediate agents in carrying out the Supreme will. Of these he believed that one (or more) was appointed to every man to be his guardian,—to perform near him certain providential functions. In the “*Phædo*,” giving his friends a summary of his creed, amongst other things he says, “that each person’s demon, who *was assigned to him while living*, when he dies, conducts him to some place where they that are assembled together must receive sentence, and then proceed to Hades with that guide, who has been ordered to conduct them from hence thither. But then having received their deserts, and having remained the appointed time, another guide brings them back hither again, after many and long revolutions of time.” This belief seems not to have been contrary to that of the ancient world generally, “insomuch,” says Mr. Grote on this subject, “that the attempts to resolve phenomena into general laws were looked upon with a certain disapprobation, as indirectly setting it aside.” This may be granted then, that he believed in the existence of demons with a special mission to act upon nature and man, one of which at least attended upon every man. But he frequently spoke of a something peculiar to himself, an influence, a voice, which diverted him from any act which he was about to commit, but never urged him on, or suggested anything. In this particular it differs essentially from the *motor* influence noticed under the former head. But this restraining power, which he said had always forbidden him to enter on public life, and prevented his preparing any formal defence at his trial—this power, although spoken of by many writers as his Demon or Genius—he himself *never personified*, but spoke of it as a “kind of voice,” or a “certain divine and spiritual influence ;” it was never more than *το* or *τι δαίμονιον*, with or without the word *σημειον* added—or *φωνη*, the Voice. Critically, it is acknowledged that the former phrase, which M. Lélut always translates “the Demon,” is only properly to be understood adjectively, even when the substantive is not expressed ; and therefore that it can but be translated “something spiritual.” M. Cousin, the learned translator of the works of Plato, holds this view as undeniable ; and one of the highest critical authorities in Europe, Schleiermacher, says—“*Semper adjectivè poni hanc vocem, neque in ullo Xenophontis aut Platonis aut aliorum Scriptorum æqualium loco substantive de deo accipi debere.*”

Cicero also interprets it as "*divinum quoddam*." It seems to have been a highly figurative method of speaking of conscience and reason, which he conceived to be stronger in him than in other men (and in so far peculiar to him); inasmuch as his recognition of the Divine Power, and the reverence to be paid thereto, was more intense and constant. For it will be found that, almost invariably after speaking of being prevented by this "divine influence" from adopting any particular course, he gives some *human* and *rational* grounds for such a determination. Thus, in his "Apology," having related how this Voice had always prevented him meddling in public affairs, he adds :—

"For be well assured, O Athenians, if I had long since attempted to intermeddle with politics, I should have perished long ago, and should not have at all benefited either you or myself. And be not angry with me for speaking the truth; for it is not possible that any man should be safe who sincerely opposes you, or any other multitude, and who prevents many unjust and illegal actions from being committed in a city; but it is necessary that he who in earnest contends for justice, if he will be safe for but a short time, should live privately, and take no part in public affairs."

And when he stated that the Voice had prevented his preparing beforehand any defence, he adds *the reason why* :—

"For what has befallen me appears to be a blessing; and it is impossible that we think rightly who suppose that death is an evil. . . . To a good man nothing is evil, neither while living nor when dead; nor are his concerns neglected by the gods. And what has befallen me is not the effect of chance; but this is clear to me, that now to die, and be freed from my cares, is better for me."

It is unnecessary to multiply instances. There is scarcely an occasion when the Voice is not accounted for in a manner equally rational.

But it may be asked, what was the meaning of those strong expressions, which seemed to imply that there was an actual audible voice? An examination of a passage in the "*Crito*" will show that these were purely poetical or figurative. His friend Crito had come early one morning to the prison, after his condemnation, with the intent to persuade him to escape. Socrates takes the opportunity to discuss with Crito the duties of a citizen; and, in the course of the conversation, shows that he must obey the established laws, at whatever cost to himself. He shows that the city has nurtured him and protected him—that he has been most especially a voluntary citizen of Athens, never having left it, except in time of war; and so recognised the right and power which her laws possessed over him. He then personifies these laws, and supposes them to be addressing him, pointing out all the benefits he has received from his

country, and all the evil that might result from his attempting to evade the decree, concluding thus:—

“But now, Socrates, you depart (if you *do* depart) unjustly treated, not by *us*, but by men; but should you escape, having thus disgracefully returned injury for injury, and evil for evil; having violated your own compacts and conventions which you made with us, and having done evil to those to whom you least of all should have done it—namely, yourself, your friends, your country, and us—both we shall be indignant with you so long as you live; and our brothers, the laws in Hades, will not receive you favourably, knowing that you attempted, as far as you were able, to destroy us. Let not Crito, then, persuade you to do what he advises, rather than we.”

“These things, my dear friend Crito, be assured I hear, as the votaries of Cybele seem to hear the flutes. And the sound of these words booms in my ear, and makes me incapable of hearing anything else.”

And thus in language as strongly, if not more strongly implying an audible voice, than any which he uses with regard to the so-called Demon, he gives the summary of the argument which by his own reason he has just eliminated in conversation with Crito. And in this there is no word whatever of the “Voice.” Socrates then acknowledged himself to be ever acting under the Divine will, which, when impulsive, he calls ο θεος; when restraining, το, or τι δαιμονιον σημειον. All men thus acting who obey the Divine will, this influence was only so far *peculiar* to him as he was ever recognising it, making it a part of his confessed creed; and, from this constant attention to it, becoming ever more conscious of it.

Though this seems to have been perfectly understood by his friends, yet from various causes a different impression arose subsequently. For purposes of their own, his accusers interpreted this mode of speaking into an attempt to introduce strange gods into Athens, and to throw discredit upon the ancient deities. His friends again, and his admirers in after times, personified this Voice, by way of magnifying, as they supposed, the importance of their master, as having been under an especial supernatural influence. And lastly, other writers have brought it forward as a proof that the pagan philosophers had commerce with evil spirits. Thus, Tertullian, in his “Apology,” says that “Socrates undertook nothing without the privy counsel of his demon; and no wonder, when this familiar is said to have kept him close company from his childhood to the conclusion of his life; continually, no doubt, injecting dissuasives from virtue.”

“That which Plutarch and other admirers of Socrates conceived as a Demon or intermediate Being between gods and men, was looked upon by the fathers of the Christian church as a devil; by Le Clerc

as one of the fallen angels; by some other modern commentators as mere ironical phraseology on the part of Socrates himself." *

3. That the reveries of Socrates were of the nature of ecstasy or trance, is unsupported by any evidence; there is, however, some to the contrary. For having fallen into one of them on his way to the "Banquet" with Aristodemus, he withdrew into a porch, and stood still, as in contemplation; and a servant having been sent out to summon him, he *refused* to come in. All this bears no similarity to the insensibility of trance. As before remarked, they were probably instances of profound meditation.

4. His belief in dreams can scarcely be gravely brought forward as even a collateral proof of unsoundness of mind. This was the age when oracles, omens, and dreams were counted amongst the most important guides in all matters; and if on one or two occasions Socrates showed that he was not entirely free from the belief of his country, it can scarcely be considered a ground for reproach. Much more surprising would it have been had not some tincture of superstition adhered in those days, even to so original and gigantic a mind as his.

5. Our limits do not permit us to examine in detail the alleged instances of prophetic power which he claimed. On some few occasions he did predicate what the result would be, as to good or evil, of certain both personal and political acts. But he generally gave the reasons for these conclusions, as has been before remarked concerning the restraining power of the Demon, derived from ordinary rational laws. On this point Mr. Madden observes, in his recent able and deeply interesting work:†

"It may be presumed that the demon of Socrates was nothing more than the rectitude and force of his judgment, which, acting according to the rules of prudence, and with the aid of long experience, supported by wise reflections, made him foresee the events of those things, with regard to which he was either consulted by others, or deliberated upon himself."

6. Socrates was undoubtedly a very eccentric man, but eccentricity is not insanity. He was certainly guilty of having a hole in his coat; he went about barefoot; if he had no supper, he would sometimes prefer to go without rather than to ask for one. A very tiresome one, too; for, like a gad-fly (to use his own expression), he would fix himself upon some puffed-up sophist, and with his endless—"Tell me, now"—"But explain to me"—he would drive the unfortunate wight into such a maze of contradictions as to expose his profound ignorance always to the bystanders, and sometimes to himself. He could not

* Grote's "History of Greece," vol. viii. p. 560.

† "Phantasmata." By R. R. Madden, F.R.C.S. 1857.

forget this even when before his judges. If Melitus could feel at all, he must have wished himself rather in the place of the accused than the accuser. But in all this there is no sign of madness; perhaps this must be sought in his moral eccentricities—for he was temperate in a circle where the drunken Alcibiades was held to be the type of all that was excellent in man; he was pure where impurity assumed its most disgusting aspects; he was virtuous and upright where selfishness was the only recognised law; he was modest where bloated self-conceit and intellectual pride were rampant; above all, he was poor when he might have had boundless wealth.

As to his positive and direct claims to be considered a man of sound mind, these are sufficiently illustrated by the themes of his perpetual teaching—a teaching that only ended with his life. These were—modesty, self-distrust, the necessity for learning, love of parents, temperance, chastity, obedience to the laws, piety towards the gods, faith in their providence, and the recognition of their benefits; a firm belief in the immortality of the soul, and the certainty of a future state of rewards and punishments, according to the deeds done on earth.

In reference to the latter themes, one passage from the “Phædo” merits quotation, as indicating strongly the very far advance which he had made in penetrating things truly divine. Having enumerated certain vices, he adds:—

“True virtue is a purification from such things; and temperance, justice, fortitude, and wisdom itself, are a kind of initiatory purification. And those who instituted the mysteries for us appear to have been by no means contemptible, but in reality to have intimated long since that whoever shall arrive in Hades unexpiated and uninitiated, shall lie in mud; but he that arrives there purified and initiated, shall dwell with the gods.”

We may not dwell further upon the character and teaching of this wonderful man. We protest against the endeavours to demonstrate a morbid alienation in the mind of one to whom, of all others, philosophy is most indebted; and conclude with Mr. Grote, that “no man ever looked upon life with a more positive and practical eye; no man ever pursued his mark with a clearer perception of the road which he was travelling; no man ever combined in like manner the absorbing enthusiasm of the missionary, with the acuteness, the originality, the inventive resource, and the generalizing comprehension of a philosopher.”

ART. III.—STATE OF LUNACY IN SCOTLAND.*

THESE official volumes—the last-named being rather voluminous—are the result of a Royal Commission, dated 3rd April, 1855, which was issued by her Majesty to inquire into the condition of public asylums in Scotland, as well as of the existing state of the law of that country in reference to lunatics, and the institutions for the insane. Various important subjects are discussed by the gentlemen who were appointed to undertake the onerous duties assigned to them; and when it is mentioned that the Commissioners were Mr. Monteith, Sheriff-Depute of Fifeshire; Dr. James Coxe, a Fellow of the College of Physicians in Edinburgh; with Mr. Gaskell and Mr. Campbell, two of the Commissioners in Lunacy for England,—such selection is a sufficient guarantee the searching investigations thus instituted would prove both instructive and of the highest moment. In drawing up the minute Report now lying before us, the Royal Commissioners divide their inquiry into six separate heads, which comprise—

“1. An abstract of the existing law of Scotland on the subject of lunacy, both as regards the custody and treatment of the persons of lunatics, and the care and management of their property.—2. A statement of the numbers of lunatics at present in Scotland, and of the manner in which they are distributed.—3. A description of the nature and extent of the accommodation provided for the insane, whether in public asylums, or private establishments recognised by law; together with an account of the condition of these establishments, and of the treatment of the lunatics confined in them.—4. An account of the condition of lunatics not confined in any of these establishments, in so far as we have been able to ascertain the same.—5. An exposition of the mode in which the law has been, and is practically administered, having special reference to the question, how far any abuses that may be found to exist, are owing to the defective administration of the present law, or may require new legislative enactments for their effectual remedy.—Lastly, A brief resumption of the leading particulars which seem to call for legislative interference; and of the principles on which it appears to us that such remedial legislation ought to be based.”

These varied matters are all elaborately discussed; and believing many points must greatly interest not only professional readers, but philanthropists generally, we propose, even at the risk of becoming tedious, to make an analysis explaining the principal questions mooted in the above-named Report. Prior, however, to undertaking this rather laborious task, it seems but simple justice to one of our own respected contributors to ob-

* “Report of her Majesty’s Commissioners,” pp. 257; with an Appendix, pp. 581. Presented to both Houses of Parliament. Edinburgh: T. Constable. 1857.

serve cursorily that, in three numbers of the "Psychological Journal" for 1856, much similar matter respecting the public lunatic asylums and the lunacy laws of Scotland have already appeared from the pen of Dr. Webster, who had also visited the public insane institutions now reported upon by her Majesty's Commissioners, and, what is worth mentioning, during the same season; whose Notes contained not only a concise account of the chief legal regulations affecting lunatics in North Britain, but likewise described the then existing condition of the identical Scottish establishments for mad patients which are elaborately noticed in the Parliamentary document now published. To use the words of a Scottish medical jurist, when alluding to these judicial observations, we can justly say, the summary in our Journal then given of the law and practice in reference to lunatics, although brief, is admirable, very correct, and complete. Indeed, there is no work on medical jurisprudence now in the hands of the profession, where the legal information thus given can be obtained; hence it becomes of great value, and constitutes a most able production; while an analogous combination of extent, with brevity and accuracy of information, appears too rarely available. Having made the above general remarks regarding the labours of our former correspondent, in again reverting to the volumes whose title heads this article, we would just observe, with reference to the law of Scotland affecting lunatics, that thinking it would seem almost supererogation for us again to go over the subject thus so recently brought under the notice of our readers, we therefore at once pass on to another division of the Report—viz., the number and distribution of the insane.

According to official returns, the total amount of insane persons ascertained as now existing throughout Scotland appears to be 7403, and are thus classified—viz.:

" Under special protection of the law	3736
In poorhouses, but not under Sheriff's warrant	253
With relations or strangers, or living alone	3798
In unlicensed establishments	24
Total }	<hr/> 7403

" We now proceed to show the proportion of the males to the females, the proportion of lunatics to congenital cases of idiocy, the social position of the patients, and the probable proportions of the curable and incurable.

" It appears that of the 7403 patients, there are—

Males	3736
Females	3667
Total	<hr/> 7403

Congenital idiots	2603
Lunatics	4800
	<hr/>
Total	7403
Private patients	2732
Paupers	4642
Criminals	29
	<hr/>
Total	7403

Again, it is also most important to add, that—

“The total number of the insane in Scotland would thus be divided into :

Curable lunatics	768
Incurable lunatics	4032
Congenital idiots and imbeciles	2603
	<hr/>
Total	7403

“The distinction thus drawn, however, can only be regarded as a vague approximation to the truth.

“In investigating the number and condition of the insane, certain facts were elicited to which it may be proper to advert under this head, as they have a bearing more or less direct on the main object of our inquiry.

“The first of these is the very large proportion of lunatics in the pauper population as compared with the other classes of the community.

“According to the returns of the Board of Supervision, the number of paupers in Scotland, registered on the poor-roll, on the 14th of May, 1855, amounted to 79,887, while the number of insane and fatuous poor, included in this number, was 3904. In other words, a population of 79,887 paupers yielded more than one-half of the whole number of the insane of the kingdom, showing the powerful affinity that exists between poverty and mental disease. Each is reciprocally productive of the other, and alternately cause and effect. A person of feeble or diseased brain, if left to his own resources, naturally sinks in the social scale, and is ultimately reduced to a state of pauperism. On the other hand, the cares that attend poverty, in conjunction with the deteriorating agency of scanty and innutritious food, have a powerful influence in weakening the mental powers, and inducing insanity. The degree in which these two causes operate is, however, widely different; and there is reason to think, that more individuals are reduced to poverty through a defective mental constitution, than are rendered insane through poverty.

“Another fact, painfully illustrative of the evils resulting from the imperfect provision for pauper lunatics, is the number of idiotic women who have borne illegitimate children, and whose mental defect is frequently manifested in their offspring. These we have ascertained to amount to not less than 126; and there is cause to believe, that many cases of this description have escaped observation; and, also, that the fact of such weak-minded females having given birth to offspring, has often, for obvious reasons, been designedly concealed. Accordingly, large as the above number appears, we are satisfied it should be taken

considerably higher. It must be kept in view, too, that many of these women have given birth to several children."

Another interesting feature equally deserves special mention—namely,

"The proportion which the number of lunatics bears to the general population, as well as the modification of their proportions according to differences of locality and other circumstances, fall naturally to be considered under this head of our Report. The total population of Scotland, by the census of 1851, was 2,888,742, while the insane of every class amounted, on the 14th May, 1855, to 7403, yielding a proportion of 2.562 per 1000, or one insane person to every 390 of the population. This, however, can only be regarded as a probable approximation, owing to the necessity we were under of taking the population as in 1851 for the basis of our calculations, while the number of the insane returned is as in May, 1855.

"Here a very interesting question presents itself—namely, whether the ratio of lunatics to the general population is increasing or diminishing. There is an idea very generally prevalent, that the number of the insane, in proportion to the rest of the community, is decidedly on the increase, and that this result is chiefly attributable to over-exertion of the mental faculties, consequent on the cares and struggles attendant on civilization. The principal reason for this opinion is, the always increasing pressure for the admission of patients into asylums. But the question here occurs,—Does this pressure really arise from an increase in the numbers of the insane, or is it caused by more attention being directed to their care and treatment? We have no previous enumeration of the insane in Scotland, and have, therefore, no standard by which to determine, whether their number has increased in a greater ratio than that of the rest of the community; but, even if this were found to be the case, we should not be authorized in ascribing the result to the increased activity and greater strain of the mental powers that accompany civilization. The question cannot be decided by an appeal to statistical returns, for we have not information sufficient to enable us to institute any useful comparison between the proportional numbers of the insane in those counties which have most advanced in civilization, and in those which have lagged behind.

"For, in the first place, in large cities, where there is the greatest mental activity, there, also, is the greatest physical deterioration. The energies of the working population are wasted by continuous labour, while their physical condition is lowered by a residence in unwholesome dwellings, and by the abuse of stimulating liquors to restore their exhausted powers. Experience shows that these combined influences constitute a prolific source of insanity among the crowded population of our towns. And, secondly, in those counties where thought most stagnates, a large proportion of the cases of mental disease is due to congenital causes. The population, unaffected by extraneous influences, intermarry among themselves, and the hereditary taint which is thus engendered shows itself unmistakeably in the large proportion of idiots and imbeciles. The preponderance of this cause of mental disease in remote counties distinctly appears, on comparing the pro-

portions of congenital cases occurring in them with those found in southern counties, where the mental powers have been more called into action, and intermarriage is less frequent. This is shown in the following tables:—

TABLE I.

Counties remote from Influences that incite to Mental Activity.

Counties.	Population.	Number of Cases of Congenital Mental Disease.	Proportion of Congenital Cases per 10,000 of Population.
Argyle	89,298	133	14.8939
Caithness	38,709	92	23.7670
Inverness	96,500	91	9.4300
Orkney and Shetland.	62,533	177	28.3050
Ross and Cromarty .	82,707	102	12.3326
Sutherland	25,793	24	9.3048
Average	65,923	103	15.6242

TABLE II.

Counties exposed to Influences that incite to Mental Activity.

Counties.	Population.	Number of Cases of Congenital Mental Disease.	Proportion of Congenital Cases per 10,000 of Population.
Dumbarton	45,103	34	7.5383
Edinburgh	259,435	*160	6.1672
Forfar	191,264	*121	6.3263
Lanark	530,169	*129	2.4331
Renfrew	161,091	*53	3.2901
Stirling	86,237	35	4.0585
Average	212,216	89	4.1933

“It thus appears that a Highland population contains more than three times the number of congenital cases of mental disease found in an equal Lowland population; and that the difference becomes much greater, if the comparison be confined to single counties of the two series—as, for instance, to Lanarkshire, and Orkney and Shetland, as extreme representatives of the two classes of counties.

“While, therefore, our inquiries afford no means of deciding whether or not the number of insane is actually on the increase, they afford us grounds for thinking that civilization, which leads to an improved condition of the people, is not productive of insanity.”

* All the cases of idiocy in the asylums and poorhouses of those counties are included in the above numbers, though many of them are from other counties.

With reference to a very important question, exhibiting the distribution of the insane, the various kinds of domiciles appropriated for their reception may next be mentioned. By the returns obtained from official parties, it appears—

“ I. The houses in which the insane are received, under cognizance of the Sheriff, consist of—

1. Chartered asylums.
2. Public asylums without a charter.
3. Poorhouses receiving patients either in separate wards, or in common with ordinary paupers.
4. Private licensed houses.
5. Houses for single patients reported to the Sheriff.
6. Prisons.
7. Schools for idiots.

“ On the 14th May, 1855,* the insane, under the special guardianship of the law, were distributed in the various houses as follows :—

In chartered asylums	2123
„ public asylums without charter	40
„ licensed poorhouses	423
„ licensed private houses	657
„ reported houses	41
„ prisons	29
„ schools for idiots	15

Total 3328

“ II. The houses in which the insane are received without the cognizance of the Sheriff are—

1. Unlicensed poorhouses.
2. Private houses not reported to the Sheriff in terms of the law, and houses of relatives.
3. Unlicensed private establishments.

The number of the insane in unlicensed poorhouses on 14th May, 1855, was	253
In private houses not reported to the Sheriff, and houses of relatives	3798
In unlicensed private establishments	24

Total 4075

“ The 2732 private patients were distributed as follows :—

In chartered asylums	652
„ licensed houses	231
„ poorhouses	9
„ reported houses	10
„ schools for idiots	12
„ unlicensed establishments	18
With relatives	1453
With strangers	297
Not under care of any one	50

Total 2732

* This date does not apply to the School for Idiots in Edinburgh, from which the returns were obtained at a later period.

“The 4642 paupers were disposed of as follows:—

In chartered asylums	1511
„ licensed houses	426
„ poorhouses	667
„ reported houses	31
„ schools for idiots	3
„ unlicensed establishments	6
With relatives	1217
With strangers	640
Not under care of any one	141

Total 4642

“The constabulary returns show that there are 3607 single patients resident with relatives, or placed under the charge of strangers, and that they are distributed as follows—viz.

Patients not paupers—

With relatives	1453
With strangers	297

Total 1750

Paupers—

With relatives	1217
With strangers	640

Total 1857

“As many as 191 patients are reported to have no one in charge of them. Of these, 50 are independent of parochial relief, and 141 are paupers.”

In regard to the accommodation supplied by public institutions, there are in Scotland, at present, seven chartered Asylums—namely, 1. The Royal Asylum, Aberdeen; 2. The Crichton Institution, Dumfries, including the Southern Counties Asylum; 3. The Royal Asylum, Dundee; 4. The Royal Asylum, Edinburgh; 5. The Royal Asylum, Glasgow; 6. The Royal Asylum, Montrose; and, 7. James Murray’s Royal Asylum, Perth. Respecting each of which institutions we now proceed to transcribe, from the Commissioners’ Report, some of the chief features characterizing these different public establishments, with various statistical details, in order to illustrate their actual working and recent condition. However, before specifically noticing the respective institutions, we would quote the following introductory remarks made by the Commissioners:—

“The existing accommodation provided for the insane in Scotland, is a proof of the interest there excited by this most destitute portion of the community. For, though no legislative enactments have compelled the erection of asylums for pauper lunatics in this portion of the kingdom, we find here several large institutions, founded, and in a great measure maintained, by the exertions and benevolence of private

individuals. These institutions, commonly called chartered asylums, from the circumstance that each has a royal charter of incorporation, are designed not only for the reception of pauper patients, but also of those whose means enable them to defray the expense of care and treatment suitable to a higher station in life. They also afford some assistance to those reduced in circumstances, who, from their previous habits, can appreciate, but are not able to pay for, a better style of accommodation.

"There are, at the present time, seven establishments of this nature, capable of admitting 572 private, and 1522 pauper patients.

"Although this amount of accommodation does not, by any means, meet the requirements of the country, yet it is satisfactory to find that so large a provision has been voluntarily made; and we would fain hope that this fact indicates the existence of such an amount of solicitude for the insane, as will lead, ere long, to the establishment of sufficient accommodation to supply the wants of the country in every district.

"It is due to all parties concerned in establishing and conducting the chartered asylums in Scotland, to express our high admiration of the motives which have led them to provide such means of succour and restoration for the insane. We have reason to believe that no country, proportionately to its population, has voluntarily done so much for this class of sufferers; and, although it may be said that Scotland presents an unfavourable contrast with most civilized States, in not having any national institutions for the reception of its insane poor, yet, as regards those erected by private benevolence, it may claim a marked and honourable distinction.

"An important fact is deducible from the histories which we have thus collected, namely, that the building and grounds being provided, the institution becomes self-supporting, the payments made for the care and treatment of the patients covering all current expenses.

"In reference to their origin, it will be observed, that when hospitals for the insane have been connected with infirmaries, they have always sprung from the latter, as subsidiary establishments, except in the case of Montrose, which presents a remarkable instance to the contrary. Here the hospital for mental affections has been placed in a primary, and that for bodily complaints in a secondary position."

These observations are highly creditable to the country respecting whose proceedings they thus speak, and we now reproduce them thus prominently in our own pages, so as to excite the emulation of other but more wealthy kingdoms, where compulsory assessments are often the usual means employed in order to procure adequate accommodation and appropriate treatment for the pauper insane.

Respecting the site, size, and construction of the chartered asylums, the Commissioners make the following judicious criticisms, which well deserve careful perusal, both on account of being apposite to various questions now under discussion, and

likewise as they convey a very good general idea of the different institutions described :—

“ The important influence exercised upon the inmates of asylums, by the nature of the sites upon which they are built, can hardly be over-estimated. With the exception of the institution at Montrose, the sites of all the chartered asylums are well selected, although few possess sufficient land to afford full agricultural employment for the male patients.

“ They are generally placed in elevated situations, commanding agreeable prospects, and, although at a sufficient distance from a town to secure privacy to the inmates, and to enable the patients to take undisturbed exercise beyond the limits of the premises, yet they are not so remote as to shut out the officials and servants from general society, nor to prevent the more trustworthy patients from enjoying the benefit of an occasional visit to the public amusements of a city.

“ The size of an asylum has a considerable influence upon the condition of the patients; and it may be considered as a settled rule, that, everything else being equal, moderate-sized asylums can be more efficiently conducted than large institutions.

“ It will be seen by reference to Appendix B, that the chartered asylums vary considerably in size,—the largest, that of Edinburgh, containing accommodation for 467 patients, whilst the Perth asylum only accommodates 183. In addition to the advantages to be derived from treatment in an asylum of moderate size, there can be no doubt that large central establishments are not so well adapted to meet the wants of the community as smaller local asylums, to which patients could be readily sent. Besides, we have reason to believe that the patients themselves prefer the smaller houses, where their individuality is more recognised, and where they have a more home-like feeling.

“ Most of the chartered asylums are well constructed, and afford good accommodation to the inmates. In some, however, faulty arrangements are observable, such as double galleries, stone floors, deficient means of warming and ventilating, and objectionable arrangements for the seclusion of refractory patients in dark rooms. In a few of the houses, two existing peculiarities are worthy of remark,—namely, central inspection staircases, and open spaces on the upper stories,

“ The Asylum of Perth, and the Crichton Institution at Dumfries, are constructed upon a somewhat similar plan. Each has a central staircase, with a curiously contrived double wall; and the galleries, which radiate from the staircase, can all be inspected through glazed apertures over the doors.”

The constitution and management of the public insane establishments of Scotland next come under observation. According to the Report—

“ The management of the chartered asylums is conducted by Boards of Directors appointed under the charters of incorporation. They consist of directors *ex-officiis*, life directors, and, frequently, also of annual directors; the appointment of the last taking place at the

annual general meeting of the contributors. As a general rule, the directors *ex-officiis* take little part in the business of the asylum, and, as the annual meetings of contributors are generally very thinly attended, the management has a tendency to lapse into the hands of a few individuals. The directors, so constituted, are thus, without any blame being imputable to them, in a great degree, an irresponsible body, there being little or no check on their proceedings, on the part of their constituents or the public. Generally, the management has been ably conducted; but, occasionally, mistakes have been committed, through which the patients have not enjoyed all the benefits which otherwise might have been afforded them. In the case of the Glasgow Asylum, for instance, the directors, in their zeal to extend the benefits of the institution, have incurred a debt of nearly 40,000*l.*, which presses heavily upon its resources, and impedes improvements which the medical superintendent is desirous to introduce. From the statements made by the secretary of the Edinburgh Asylum, there is some reason to fear that the directors of that institution are about to fall into a similar error. Although we think it necessary to allude to the pecuniary embarrassments of these asylums, there can be no doubt that the position of their directors has been one of peculiar difficulty; for they were left to decide between extending the accommodation beyond the limits warranted by the state of their finances, or resisting the continually increasing demands for admission. In deciding on the former course, therefore, they were actuated solely by motives of humanity, and were, at the same time, almost certain of incurring great personal trouble and responsibility."

With regard to medical surveillance, and power which official professional gentlemen possess, the Commissioners observe—

"The medical superintendence of the chartered asylums is, as a rule, confided to a resident physician, who is appointed by the directors, and is removable by them. His powers, in regulating the treatment of the patients, are virtually plenary, though subject to the control of the visiting committee of the directors, and occasionally, as at Perth and Dundee, to that of a non-resident, or consulting physician."

Although the resident medical superintendent in most instances has considerable directing power, he should nevertheless have more administrative influence than he often actually possesses; indeed, he ought to exercise *paramount* authority in everything appertaining to the management, and moral, medical, or physical treatment of patients under his charge. In fact, he must be like the colonel of a regiment. He should further be invited to attend all meetings of managing committees, although without the privilege of voting—being a salaried officer—in order that he might thus give opinions respecting the admission of new patients, or upon any professional questions which then arose regarding matters connected with the institution or its inmates, as also to prevent future misunderstandings. This system is advantageously pursued at Bethlem Hospital, where, during all weekly meetings

held for the reception of patients, their discharge, and so forth, the resident physician constantly attends, and sits with the committee. The same mode of proceeding ought to be followed at all public insane asylums, since it could not but facilitate business, and be otherwise beneficial; while the medical superintendent would thereby occupy, virtually before the world, the position to which he is entitled, as well from professional rank and scientific attainments, as on account of the responsible office he actually fills in such establishments.

Respecting the all-important question of instrumental coercion and seclusion, the Report contains the following pertinent remarks:—

“Personal restraint, by the application of the strait-waistcoat, or of straps or muffs, is almost entirely banished from the chartered asylums, but we have reason to think that seclusion for long periods is frequently used. This remark applies more especially to the asylums of Montrose, Glasgow, Aberdeen, and Edinburgh. The necessity for the use of lengthened seclusion is mostly due to faults of construction in the house, to overcrowding, to deficiency in the means of exercise, and to the want of a sufficient number of attendants; causes which are, to some extent, beyond the power of the medical superintendents to remove.”

“The statutes not requiring any record to be made of the confinement to which patients may be subjected in seclusion-rooms, we are unable to report with accuracy as to the prevalence of the practice, or to make any comparative estimate of the extent to which this species of restraint has been resorted to. It is to be regretted that such written accounts are not generally kept; for there can be little doubt that if an entry of each instance of seclusion, and also of the reason assigned for resorting to it, had been made necessary by law, a powerful means of checking and diminishing its use would have been established. The requirements of the Legislature having been satisfactorily observed in the chartered asylums, this would, in all probability, have been the result of such a register of seclusion in these institutions; but as respects licensed houses, where an utter disregard has been shown of the clear, precise, and stringent regulations already enacted as to the use of mechanical restraint, little benefit would have arisen from any further enactment for recording this mode of restricting the liberty of the patients.”

Occupation of patients, and the modes usually adopted for their amusement, are also noticed. Regarding the latter, it is stated that

“In several of the asylums, very much has been done to afford recreation and amusement to the patients. Various sports and games have been introduced, and in most of the houses there are frequent excursions, and occasional pic-nics, concerts, lectures, evening parties, and dances. In that of Dumfries, there are also theatrical performances.

"The asylum in which least has been accomplished in this respect, is that of Aberdeen.

"While fully recognising the importance of recreation and amusement, we are disposed to think that the efforts of some medical superintendents have been extended too much in this direction, to the exclusion of more serious occupations. Simple amusement can never dispel *ennui*, nor afford the same amount of healthy occupation to the mind as useful and productive labour.

"In most of the chartered asylums, there is a want of objects of every-day interest, calculated to afford quiet pleasure and enjoyment, which might be supplied at very little cost. The providing of such objects is not a matter of indifference, for they tend to draw the patient's mind from its morbid thoughts, and to prepare the way for recovery.

"At Dumfries, in this respect, as well as in every other that tends to alleviate the condition of the patients, a great deal has been accomplished. This asylum contains a museum of specimens in natural history, and also a library consisting of about 5000 volumes. Here, and also at Morningside, periodical publications are regularly printed and circulated, many of the articles being contributed by the patients themselves."

The Commissioners subsequently discuss other interesting points connected with the management and actual results obtained at different public asylums, but into which our limited space prevents us now entering. We, therefore, can only transcribe the following summary of their observations:—

"Reviewing generally the condition of the chartered asylums, it is gratifying to be able to report that they are in many respects in a highly satisfactory state, and that the large amount of accommodation which they afford to private patients is duly appreciated by the public.

"It appears that of the 833 private patients placed in asylums in Scotland, 652 are in chartered asylums, and only 231 in licensed houses.

"The contrast in this respect, between Scotland and the southern portion of the United Kingdom, is worthy of observation.

"On reference to the last Report of the Commissioners in Lunacy, it appears that of the 4442 private patients in asylums in England and Wales, as many as 2746 are in private asylums, and 1696 are in public hospitals; this latter number comprising 669 patients in Bethlem, St. Luke's and Guy's Hospitals, and the Institution for Idiots. After deducting these, therefore, it appears that in English hospitals, which are analogous to the chartered asylums in Scotland, the private patients amount to only about 1000, whereas as many as 2746 are in licensed houses. That this state of matters arises, at least in some degree, from the want of a larger amount of this kind of accommodation in England, may be inferred from the fact that a large proportion of the private patients in the Crichton Institution are natives of England.

"The gentlemen who undertake the responsible duties of governors or directors in the chartered asylums, devote much time and considera-

tion to the general management of their respective establishments ; and they manifest an earnest desire to promote the welfare and consider the comfort of the inmates, and to advance the interests of the institutions over which they preside.

“The treatment of the patients is liberal and judicious ; and, notwithstanding existing difficulties and obstacles to improvement, their condition is, on the whole, deserving of commendation.

“The treatment adopted towards the educated classes is, in many respects, very praiseworthy. In addition to the means employed to diversify the daily course of life, and to break through the monotony and routine too common in most lunatic asylums, the patients have the benefit of frequent, and, occasionally, of extended excursions ; and, in a few instances, houses have been taken at the sea-side for the use of the patients during the summer months.

“All the chartered asylums have comprehensive codes of printed rules and regulations. Annual accounts of receipts and expenditure, as well as reports of the management and treatment of the patients, are published, giving full details of the proceedings, in each establishment, during the year.

“Various records, not required by statute, are generally kept, among which is a casualty-book, and also a case-book, containing a statement relative to each patient, showing the origin, course, and duration of the disease previous to admission, and the subsequent treatment adopted in the asylum. Considerable care is also taken to ascertain full particulars respecting the previous condition of the patients ; and, for this purpose, printed questions, designed to elicit information, are issued to applicants for the admission of patients.

“The chartered asylums of Scotland are superintended by experienced medical gentlemen, of high standing in their profession, aided in the larger establishments by able assistants. From their size, and capabilities of receiving a considerable number of better-class patients, they are able to command the services of accomplished practitioners ; and, in this respect, they have a manifest advantage. In the generality of them, nevertheless, an obvious evil results from the congregation of patients belonging to various grades of society in the same institution. A minute separation of the inmates into classes, both as respects position in life, as well as the nature of the malady, becomes necessary ; and, consequently, the patients are subdivided into a large number of communities, each having their respective apartments and airing-grounds. By the adoption of such arrangements, liberty within doors is diminished, the facilities of egress into the open air are impeded, and the space appropriated for exercise is considerably curtailed ; and the general results are isolation of individuals belonging to the upper classes, restricted exercise to the inmates generally, and lengthened seclusion of the more refractory patients.

“At Dumfries, many of the objections above adverted to have been surmounted by the erection of a separate building for the paupers, adjacent to the original structure, which is now appropriated to patients belonging to the better ranks of society only.

“As regards the classification and separation of the patients, in

reference more particularly to their mental condition, we are of opinion that the distinctions and subdivisions are too minute and special, and that the different classes of patients are not sufficiently associated together.

"At Dumfries, the demand for the admission of those in less affluent circumstances has been laudably met, by appropriating some of the rooms originally designed for the wealthy classes to the use of patients having only moderate resources. It appears, from the evidence of Dr. Browne, that two important results have followed the adoption of this plan—the first as respects the condition of the patients, and the other as respects the funds of the establishment. He states that not only are the patients paying moderate rates placed under more favourable circumstances as regards treatment and prospect of recovery, by being associated together, but, further, that the establishment derives more benefit from such a class, in a pecuniary point of view, than from patients who pay much larger sums for separate accommodation.

"The steps lately taken at Montrose, by the resident physician, in order to afford increased accommodation for patients of the middle class, by giving up a portion of his private residence for their use, are well worthy of commendation.

"In the chartered asylums generally, few or no limitations are made as regards the nature of the cases for which admission is requested; and patients are very seldom refused on account of epilepsy, pregnancy, the long duration of the malady, or the violent conduct of the patient. Occasionally, however, cases sent by Procurators-Fiscal, or removed from prisons, are rejected, on the ground that the effect upon the other patients would be prejudicial.

"Considerable facilities are afforded for the ready admission of patients, and no regulations are adopted for restricting their reception to particular days. Neither is it necessary to bring them in the first instance before the committee.

"As an instance of the confidence reposed in the medical superintendents of chartered asylums, and as an indication that some diminution has taken place in the repugnance to asylums, which hitherto has been, and still is so prevalent, we may mention that in many of the asylums, a number of individuals have voluntarily presented themselves for admission. They are generally cases of relapse, and frequently persons having a suicidal or destructive propensity, who, feeling certain premonitory symptoms, well known to themselves as the precursors of an attack of mania, at once take the judicious step of placing themselves under care and treatment."

In concluding this portion of their Report, the Commissioners judiciously observe that, at several public asylums, there appear some rather remarkable distinctions as respects the remuneration of officials. The disproportion between the sums paid to the secretary and treasurer of each institution is the most striking. At Edinburgh, Dumfries, and Glasgow—all large asylums—the matrons actually receive *higher salaries* than the assistant medical officers. This is wrong, if not unjust; and, in our estimation, such practices ought to be altered. Not only should every mem-

ber of the medical staff be better remunerated than occurs now in several instances, but, to quote our correspondent, Dr. Webster, when adverting to these and similar matters,—

“The matron—who is sometimes too highly salaried, in relation to other officials and her actual position—appears frequently not sufficiently subordinate. This objection has been felt elsewhere; and in France, for example, where they manage many things often so well in lunatic asylums, a lady matron is almost unknown. Throughout Scotland, as also in England, sufficient attention is not invariably paid to their qualifications in the character of housekeepers, head attendants, and as sick nurses, when the governors select for appointment this occasionally rather too self-important personage.”

These remarks deserve attention, and have been here reproduced for the special consideration of managing committees and public authorities who superintend Scottish chartered lunatic asylums.

According to particular extracts in our previous pages, the Commissioners seem, on the whole, to have been much satisfied with various public institutions for the insane in Scotland, as likewise regarding their general management. In reference, however, to licensed houses for receiving lunatics, they found great varieties in regard to accommodation and treatment, although the rates of payment were much the same in amount. These private establishments—many being chiefly for pauper patients—are situated principally in the neighbourhood of Edinburgh, viz., fourteen near Musselburgh, with several in Lanarkshire. The reason why so large a proportion of such licensed houses have been opened in the vicinity of the Scottish metropolis, is considered to be accounted for by the great facility with which permissions are obtained from the authorities of Mid-Lothian to receive and treat lunatics. These institutions vary considerably in size: some contain only one lunatic, and others nearly ninety. A few admit none but private patients, several only insane paupers; while the majority take both classes as inmates of their establishments.

Alluding generally to licensed houses for the insane in Scotland, the Report states:—

“The proprietors of some of the houses receiving patients belonging to the upper grades of society, are men of education, and well fitted, by professional training, to have the management of institutions for the insane. But, as a class, those who receive pauper patients are totally unfit for the proper discharge of the highly responsible and delicate duties they undertake.

“Licences have been conceded to persons who have no knowledge whatever of the nature or treatment of insanity, who have not even the experience of an ordinary nurse in a general hospital, and who are, besides, unprovided with sufficient capital to make a satisfactory pro-

vision for all the wants of those under their charge. Thus, at Musselburgh, we found one proprietor whose previous occupation had been that of a victual-dealer; another had been an unsuccessful baker; another had been a gardener; and the last person who had obtained the Sheriff's sanction for a licence, was a woman keeping a public-house, who had taken a second house for the reception of lunatics, with the view, as we were told by her daughter, of keeping both for a while, and continuing that which should prove the more successful speculation."

With reference to construction, and the accommodation supplied at various institutions, adverted to by the Commissioners, it appears,—

"With the exception of the convalescent department of Saughtonhall, none of the houses occupied as private asylums were originally built for the purpose. In one or two of the better class, such as Saughtonhall and Whitehouse, great expense has been incurred by the proprietors in providing suitable accommodation for the patients; but generally a private house has been rented, or bought, and afterwards altered and enlarged, to fit it (in most cases very imperfectly) for its new destination. The sole aim, especially in the houses where the patients are principally paupers, has evidently been to accommodate the greatest possible number at the smallest outlay. Hence outhouses, which were never intended for human habitations, have, in some cases, been filled with beds, and used as accommodation for patients both by day and night. In other asylums, such as that of Langdale, large dormitories have been built, sufficiently spacious for the number of occupants, but bare, comfortless, and insufficiently furnished. In other cases, again, every room is overcrowded, and houses of moderate size are made to accommodate a surprisingly large number of patients. Thus, the licensed house of Lilybank, at Musselburgh, which is rented at 35*l.* a year, has a population of 73 patients, besides the family of the proprietor, and the attendants. Frequently, also, there is no proper separation of male and female patients, who are placed in adjacent apartments approached by the same stair or passage, who use the same airing-courts, and are not even provided with separate water-closets.

"Another consequence of the prevailing tendency to economise, is a general want of furniture, and in several instances an almost total absence of everything that is not absolutely necessary, and even of articles that among the poorest people are considered indispensable. Most of the pauper houses have no day-rooms, the patients, when not in the airing-grounds, occupying their crowded sleeping-rooms during the day. These rooms are, for the most part, unprovided with seats, and the beds are used as substitutes. There are commonly no tables, and the meals are served in the most slovenly manner. The patients eat their food seated on the beds, or squatting on the floor of their rooms, or in corners of the airing-courts."

Upon the important subject of medical attendance at the private establishments now under review, the following remarks

are made, but which, it is to be hoped, may be overdrawn, and apply only to exceptions:—

“In two or three instances, the proprietors of licensed houses are medical men, who conduct their establishments without any other medical aid; a practice which, under the present system of imperfect supervision, is open to objections, especially in the case of pauper houses, as it leaves the treatment of the patients entirely in the hands of parties whose pecuniary interests run counter to a liberal treatment of the patients. In other cases, the independence of the medical attendant is affected by his being liable to dismissal, should he place his opinion in antagonism to the views of the proprietor. He, in fact, holds the appointment only while it pleases the latter to retain his services, and hence his power of remedying abuses is greatly circumscribed. The existence of improper practices would, we conceive, be in some measure checked, if the medical attendant of a licensed house had greater authority, and if he were placed in a more independent position. At present he is appointed and dismissed at the pleasure of the proprietor. His duties are not defined; he does not regulate the diet or exercise—does not examine the clothing or bedding; in fact, he takes little or no part in directing the moral treatment of the patients, his functions being chiefly confined to prescribing in case of bodily illness. In some houses, two medical gentlemen are in the habit of attending, each taking charge of a certain number of patients; but generally the proprietor orders the shower-bath seclusion, or mechanical restraint, to be applied at his own discretion, without even consulting them. The consequence is, that mechanical coercion is applied and continued in these houses to a considerable and much greater extent than is known to the medical officer.”

Notwithstanding the interesting discussions which have prevailed recently, and for many years, throughout England respecting physical coercion in cases of insanity, which have ended in its now almost total rejection, as not only cruel treatment, but most injurious to patients whenever employed, matters appear very different in Scotland, at some private receptacles, to what they are found to be in public or chartered institutions. For, when alluding to the use of mechanical means and seclusion, the Royal Report says—

“Instrumental restraint is in very general use in all the pauper houses, and not unfrequently also in the houses for private patients. There are houses in which some of the paupers are constantly manacled, either with the view to prevent their escape, or to keep them from attacking the attendants or patients. The strait-waistcoat is in daily use. The cause of this large amount of mechanical restraint appears to be chiefly due to the very small number of attendants, to deficient exercise, and to the great want of small rooms for the temporary separation of excited patients. Notwithstanding any regulations to the contrary, we have reason to think that, in most of the licensed houses, the attendants have the power of applying restraint at their discretion.

In almost every house, we found handcuffs, leg-locks, gloves, straps, and strait-waistcoats, and these not in the custody of the proprietor or medical attendant, but hanging up in the wards, or in the rooms of the attendants, who were evidently without any check as to their application, showing that the practice of restraint is still very prevalent. We may here mention the fact, that, in the early part of the present year, one of the principal cutlers in Edinburgh applied at the Morningside asylum for a pattern of the manacles and leg-locks used there, to enable him to execute an order he had received from one of the houses in Musselburgh. It is almost needless to remark that the superintendent was unable to comply with the request.

"Seclusion rooms are attached to some of the licensed houses. In one or two they are understood entirely to supplant physical restraint, but usually they are supplementary to it, and patients confined in them are sometimes also mechanically restrained. They are generally located in outhouses, and are frequently without the means of warming and ventilation."

Without entering any further, at present, into various collateral questions of interest connected with the establishments now under discussion, as the subject is by no means agreeable, the following summary, drawn up by the Commissioners, may be quoted to indicate the views they arrived at, or entertained, after due inquiry and personal inspection:—

"The bedding is of a coarse and cheap description, insufficient in quantity, and it is not renewed when filthy—whereby a saving of materials is effected. A further saving is also obtained by making one bed serve for two, and even three patients.

"The beds, in some cases, serve the purposes of seats; there is a general want of tables, and utensils necessary in a household, and of articles needed by the sick and infirm, as well as of books, and other means of amusement. Thus, in respect of furniture, &c., very little outlay has been made. By crowding the patients together day and night, the expense of fuel is diminished.

"The inmates during the winter months pass the greater part of each 24 hours in their beds, whereby candle-light is saved. In Langdale asylum the patients are not allowed candle-light at any season.

"By removing the body-linen at night, and by the long use of articles without washing, the ordinary expense in wear and tear is prevented.

"Judging from the diet served to the patients, the expenditure in food must be small; few extra articles of diet are provided, and little or no tobacco is allowed the patients.

"As respects service and wages, the employment of mechanical restraint, as a substitute for watchfulness; the mode of diminishing labour by placing two patients to sleep in the same bed; the plan of keeping the patients in the yards, and thus obviating the necessity of employing a paid servant to accompany them in their walks, or to induce them to enter on some occupation—are obvious means of reducing the expenditure in these respects.

"In bathing, and means of personal cleanliness, in washing of clothes and bedding, the outlay appears to be very small and inadequate.

"With the above facts before us, we cannot doubt that, in many instances, practices obviously wrong, and detrimental to the patients, have been adopted in licensed houses, because an increased profit would thereby be obtained by the proprietor; and hence it may be well here to enumerate, in contrast to the deficiencies of the licensed houses, a few of the advantages offered in the chartered asylums, where the only motives are the welfare and benefit of the patients."

Poorhouses and prisons next occupy the Commissioners' attention. Here, likewise, while some things are spoken of approvingly, many were considered to require amendment. The lunatic wards are generally small and ill-contrived, while economy is what the parochial authorities chiefly study in various instances. The accommodation afforded seemed often insufficient, the rooms being badly furnished, and little if any attention paid to giving a cheerful prospect to such dwellings. The usual medical attendant appears frequently too dependent on the parties appointing him to the office he fills, to be able to perform his professional duties satisfactorily. Although there sometimes prevails overcrowding, the clothing of inmates is generally of a good description. Personal cleanliness, they say, seems attended to tolerably; while the diet in several poorhouses appeared even superior to that of ordinary paupers. At some places the proportion of recoveries was high, but in these receptacles the mortality of patients was reported as usually greater than the chartered public asylums generally exhibited.

On the other hand, the treatment which lunatic inmates received in prisons was reported to have been generally as good as circumstances allowed; although occasionally it is considered that some lunatic prisoners have been roughly treated, of which an example is mentioned.

The condition of criminal lunatics is afterwards noticed. The total number of this class is not large, and all are located in the general prison at Perth, with one exception—who, from some unascertained cause, has been left in the Edinburgh Asylum. Those patients now in the Perth gaol amount to 28, of whom 22 are males and 6 females. Respecting this category, or insane criminals, so enumerated, the Report says—

"In the treatment of the criminal lunatics at Perth, a sufficient distinction is not made between disease and crime. An individual who, in a state of insanity, commits an offence, and who, by the verdict of the jury, is acquitted of the guilt of crime, is, nevertheless, there treated as a criminal, in so far, that he is kept in confinement, not as a patient, but as a prisoner; and is, in accordance with this distinction, deprived of those means of treatment which might have conduced to his recovery—or, if this were impossible, have alleviated his condition.

"In the lunatic wards of the prison, there are no proper means of classification; and all the patients, of whatever condition in life, must associate together. There are two airing-courts for the males, and one for the females, all of very moderate size; but, apart from them, there is an almost total want of the means of occupation and amusement. There may be sound reason in not allowing a criminal prisoner to better his condition by the expenditure of his private means; but it seems unnecessarily harsh to place an insane patient in circumstances where he is deprived of comforts with which his friends are willing to provide him, and which would be supplied in an ordinary asylum. Viewed in this light, the placing of criminal lunatics, whose means are sufficient to pay the rates of the chartered asylums, in the cells of the lunatic wards of the Perth prison, is virtually putting the lunatic as a criminal, for acts for which he has either not been tried, or for which the jury has declared him not responsible."

Besides the lunatic convicts just mentioned, it is further stated that

"To this number ought to be added, as belonging to the same category, those lunatic convicts who are sent back to local prisons for the purpose of being liberated at the expiry of their sentence, and who, on liberation, are again immediately arrested and conveyed to asylums. What the number of these may amount to, we have no means of forming an accurate estimate, for the prison authorities on their liberation make no inquiry as to their future disposal, nor do the asylums to which they are conveyed make any investigation into their past history. There is here a complete break, which arrests all further attempts at accurate research. It is, indeed, one of the greatest defects of the present system of treating lunatic convicts, that, at the expiry of their term of imprisonment, they are discharged without any proper provision being made for their future care."

Suggestions as to the treatment and disposal of criminal lunatics are subsequently discussed, into which we do not now enter. In recapitulation of this subject, moreover, the Commissioners subsequently observe that

"The number of such lunatics in Scotland is too small to require the erection of a special asylum for their reception; while, on the other hand, it is too great to warrant the continuance of the present system, which fulfils no purpose beyond that of security. It must, however, be borne in mind that the future number of criminal lunatics will greatly depend upon the manner in which it shall be determined hereafter to dispose of convicts—whether they shall be retained in prisons in this country, or be transported beyond seas. The small portion of female criminal lunatics in the wards of the General Prison at Perth is, no doubt, partly owing to the small number of female convicts hitherto retained in Scotland."

The condition of insane patients not resident within asylums is next investigated in the Report; the first being pauper lunatics living with relatives or strangers. Private insane

patients residing with relations, or those in no way connected with the lunatics, are adverted to subsequently. This insane class is numerous; only ten living in houses reported to the Sheriff, while not less than 1800 such unfortunate cases are in no way officially recognised. As illustrations of the improper proceedings which seem to prevail, without any licence or warrant from public authority, in too many examples, the Report says that, in general, only one patient occupies the same house, but occasionally it is otherwise. For instance—

“One of these houses is situated at Trinity, near Edinburgh. It is intended, principally, for the reception of ladies addicted to intemperance; but they are detained against their will, and measures are, accordingly, taken to prevent their escape. The windows of the house are all barred, the front gate is kept constantly locked, and the ladies are very seldom allowed to go beyond the court and garden, which contain only a few square yards of ground. The house was visited on 12th July, 1855, and then contained three patients,—one of them a male, suffering from general paralysis. The second house is situated in the village of Laurencekirk in Kincardineshire, and contained, when visited on October 1, 1855, two insane and two sane boarders—all females. This house, we were informed by the proprietor, is known to the Sheriff of the county as one receiving lunatics; but he does not consider it necessary to grant licences, or to visit it. Another house was mentioned to us as existing at Haddington; but we found, on visiting that town, that it had been closed for some time—it was said in consequence of the death of the wife of the proprietor. Although the above are the only private unlicensed houses to which our attention has been specially called, we have reason to think that others exist in Skye, and similar remote districts.”

When further illustrating this part of their inquiry, the Commissioners state—

“Unlicensed houses have been opened, as trading concerns, for the reception of certain classes of patients, who are detained in them without any safeguard whatever against ill-treatment or abuse.

“A very large number of single patients are detained at home, or illegally placed in the houses of strangers. The generality of these are in a most destitute condition, being badly lodged, ill-fed, scantily clothed, and not provided with sufficient bedding. A few are subjected to personal chastisement, some are permanently chained, others are placed in outhouses, or are locked up in small closets just capable of holding them. Many are filthy in their persons, infested with vermin, covered by mere rags, or allowed to remain perfectly naked. Some are without bedding, except loose straw or heather cast on rough boards, and their rooms emit an intolerable stench. Others, again, are homeless, and are allowed to wander at large.

“A considerable proportion of the weak-minded females have borne illegitimate children, and in many of these instances the mental imbecility is apparent in the progeny. Not only are many of the single

patients grossly neglected, but many of them are a great charge and source of anxiety to their relatives, and a cause of apprehension to the public. In remote districts, the patients are generally allowed to remain without appropriate treatment till the malady has become incurable, and only when troublesome or unmanageable are they sent to an asylum, always at a great distance from their homes and relatives. They are often harshly treated, and during the journey to the asylums are frequently painfully manacled, or secured with ropes, sometimes bound so tightly as to penetrate the flesh; and cruelties of this kind appear to pass unnoticed and unpunished. They are recklessly transported from one place to another, and sometimes brought from remote districts, and shamefully cast free among the population of large towns, to get rid of the expense of their maintenance."

But our analysis of the very important official document, now brought under the notice of readers, must here draw to a close. Other interesting and important matters of inquiry might doubtless be made the subject of additional instructive discussion, had not the limited space presently at command been already exhausted. Therefore, although many other valuable extracts could easily be here made from the official report in question, and which truly merit careful perusal, we refrain, while seriously recommending those parties in authority throughout Scotland, who take an interest in such matters, or have been referred to in the document itself, seriously to read the observations there made on various subjects investigated. Finally, we would now conclude by directing attention to the specific remedies and legislative measures suggested in the following summary, wherewith the Scotch Commissioners terminate their Report:—

"1. The erection of district or county asylums for pauper lunatics, including accommodation for the insane belonging to the labouring classes, who are not strictly paupers. Likewise, more suitable accommodation for criminal lunatics.

"2. Means for ensuring greater caution and discrimination as regards the licensing of houses for the reception of the insane; for imposing some check upon the licensing of new houses; and for conferring powers to close those already opened for paupers, so soon as public asylums shall have been erected; or, at any other time, if not properly conducted.

"3. Regulations, by which all pauper lunatics, not in asylums, shall be brought under proper visitation and care, and periodical reports be made, as to their condition, by medical men, so as to afford a safeguard against abuse and ill-treatment, and secure the ready and careful transmission of all proper cases to asylums.

"4. An accurate definition of the powers and duties of Sheriffs, in reference to the insane, so as to secure a more uniform practice and united action amongst them.

"5. Rules for the guidance of the Board of Supervision, parochial

boards, inspectors of poor, and district medical officers, in all matters relating to the management of the insane.

"6. More complete regulations, in reference to medical certificates; to prevent interested parties signing them; to specify the length of time the document shall remain in force; and to require a statement of the facts or evidence upon which the opinion as to the patient's insanity is founded. Also a limitation of the time during which the Sheriff's order shall remain in force, previous to the admission of the patient, and also in case of escape.

"7. The formation of a complete system of schedules and returns, together with full records of all admissions, discharges, deaths, and accidents. Also the institution of registers and case books, showing the medical treatment pursued in each case, and whether, and to what extent, restraint and seclusion were employed.

"8. Comprehensive regulations applicable to licensed houses and poorhouses, while continuing to receive lunatics, for securing to the patients sufficient medical and other attendance; kind and appropriate treatment; proper diet, clothing, bedding, exercise, and recreation; and adequate means of religious consolation.

"9. A requirement that, on recovery, patients shall be discharged by the medical attendant of the establishment.

"10. Restrictions on the removal of pauper patients by inspectors before recovery.

"11. Precautions for preventing injustice in transporting aliens.

"12. Better regulations as to dangerous and criminal patients.

"13. Measures by which persons labouring under insanity may voluntarily place themselves under care in an asylum.

"14. Special regulations for prolonging control over cases of insanity arising from intoxication.

"15. Enactments for extending further protection to the property of lunatics, and for ensuring the proper application of their funds.

"16. The imposition of suitable penalties for infringement of the law, and power to modify them according to circumstances.

"17. Powers to raise sufficient funds for the purposes of the Act.

"18. The creation of a competent Board, invested with due authority, and to whom the general superintendence of the insane in Scotland shall be intrusted; including powers to license houses for the reception of the insane; to visit all asylums, licensed houses, poorhouses, and houses containing only single patients; to order the removal of patients to or from an asylum, or from one asylum to another; to give leave of absence to convalescent patients; to regulate the diet in asylums and licensed houses for pauper patients; to make regulations for their management, &c., &c.; with direction to report to the Secretary of State for the Home Department.

"19. The formation of local boards for the management of individual asylums, who shall act in conjunction with the General Board."

The large appendix accompanying the Blue Book, which has now been the subject of our critical remarks, is really a voluminous production. It contains, spread over 581 pages, much very

interesting historical matter, regarding the origin, date of opening, subsequent progress, and recent management of the various chartered asylums of North Britain, besides numerous statistical details, illustrating each establishment. Farther, it also gives the evidence of different parties therewith connected, and belonging to or interested in private receptacles for the insane who were examined; and whereupon the Commissioners, of course, have virtually based their subsequent recommendations.

After the facts thus officially published have been maturely weighed, but without any leaning either in favour of, or against the parties chiefly implicated, impartial persons will then be fully able to form an unbiassed opinion in reference to the justice or necessity of the different propositions now authoritatively recommended.

ART. IV.—STATISTICS OF INSANITY.*

THE work before us is a valuable contribution to the science of Psychological statistics. Bethlem Hospital admits within its walls three classes of patients, viz., CURABLES, INCURABLES, and CRIMINALS. It is to the first of these classes that Dr. Hood directs his attention. He says it is his object to confine his observations to

“The statistical history of the patients admitted as *curables* into Bethlem Hospital during the ten years ending December, 1855,” by noticing in succession the following subjects:—

- | | |
|----------------------------------|--|
| 1. Patients admitted as Curable. | 10. Duration of Disease before Admission. |
| 2. Age. | 11. Number of previous Attacks. |
| 3. Sex. | 12. Time of Attacks. |
| 4. Education. | 13. State of the General Health. |
| 5. Religion. | 14. Form of Insanity. |
| 6. Domestic Condition. | 15. Treatment of Insanity. |
| 7. Social Condition. | 16. Causes of Death and post-mortem appearances. |
| 8. Residence. | |
| 9. Apparent and Assigned Causes. | |

During the years extending from 1846 to 1855 inclusive, the number of patients admitted as curable into Bethlem Hospital was as follows:—

Male	1066
Female	1663
Total	2729

* “Statistics of Insanity; being a Decennial Report of Bethlem Hospital, from 1846 to 1855 inclusive.” By W. Charles Hood, M.D., Resident Physician of Bethlem Hospital, &c.

CURED.—Male	574
Female	905
Total	1479
Per centage, 54·19.	
DIED. —Male	76
Female	98
Total	174
Per centage of deaths, 6·37.	

Aggregate of the 100 Years ending 31st December, 1855.

Admitted.	Cured.	Per cent.	Died.	Per cent.
19,373	8341	43·05	1603	8·27

It would appear, by comparing the per centage of recoveries and deaths in various British, American, and Continental asylums, that 39·74 per cent. are the recoveries upon the numbers admitted, and 10 per cent. the deaths on the numbers resident. The following historical facts connected with the early history of this hospitals are of interest :—

“On the authority of Stow, who derived his information from Dr. Tyson, the Physician to the Hospital at that time, 1294 patients were admitted between the years 1684 and 1703; and of these 890, or about 2 in 3, were cured. But between the years 1784 and 1794, when 1664 patients were admitted, the number of recoveries was 574, or only a little more than 1 in 3. We next learn, from a report which Dr. Prichard obtained from Mr. Lawrence, (*“A Treatise on Insanity,”* 1835, p. 141,) that the number of recoveries *increased* after the Hospital was removed to its present site. This report extends from 1819 to 1833. During this period 2445 patients were admitted; and 1124, or 1 in a little more than 2, were discharged cured.”

In estimating the per cent. of recoveries either in Bethlem or St. Luke's Hospitals, Dr. Hood fairly states that—

“It is necessary to bear in mind the particular rules of the Institution, which are peculiar to it and St. Luke's. These regulations render ineligible all applicants who have been insane for more than twelve months; all who are afflicted with paralysis, epilepsy, or any other form of convulsive disease; all who have been discharged, *uncured*, from other Hospitals; and all aged and weak persons, and pregnant women. In addition to which, those who have not recovered at the expiration of a year after admission, are dismissed.* Rules so

* Although the rules of the Hospital limit the period of residence for patients on the Curable Establishment to one year, the sub-committee have the power of

stringent must have considerable interest upon the number of recoveries and deaths; and it is interesting to inquire what that influence may be. At first it might be supposed that the number of recoveries ought to be increased by leaving out unsatisfactory and hopeless cases; but, on the other hand, many additional recoveries would undoubtedly be recorded if the uncured patients were not discharged at the end of twelve months: the effect, therefore, of the rules of this Hospital upon these statistics is not at all evident. That many patients would recover if they were allowed to remain in the Hospital for a longer time than twelve months is very evident, and that this is so, may at once be shown by a table which gives the experience of the Salpêtrière, under Esquirol, for a period of ten years."

Certainly this is the rational mode of estimating the ratio of cures in any asylum, public or private. We feel satisfied that many patients, discharged as cured, cannot properly be included in this class. We have reason to believe that several patients, dismissed from one of our Hospitals as cured, were admitted within a few weeks and months into other asylums in a very degraded state of mind. Great caution should be exercised in placing patients among those considered as cured, and we cannot be too careful in not confounding cases of temporary tranquillity and apparent freedom from delusion or hallucinations with those who have *bonâ fide* been restored to reason; without great caution in this respect, the statistical data of asylums will be valueless. A patient cannot properly be considered as cured, merely because the mental excitement under which he laboured on admission has subsided, and he no longer appears to be under the influence of any aberration of idea. Instances have come under our own observation of patients having been discharged as "cured," who have, in a few days after their discharge, been acutely insane. Again, as Dr. Hood fairly represents, no fair comparison can be instituted between Bethlem and St. Luke's, and other public or private institutions for the treatment of the insane. In both of these institutions the cases are picked and selected; in other words, they only admit within the wards of the asylum cases of insanity presenting the most favourable conditions for recovery.

It is therefore obvious, when we consider that, in other asylums, bad as well as good cases are admitted, that the statistics of recovery in an asylum like St. Luke's cannot, with any degree of fairness, be brought into juxtaposition with the statistics of recovery of other asylums. We have no hesitation in

extending, on the recommendation of the Resident Physician, that time to fifteen or eighteen months, if the character of the complaint justifies the hope of recovery or improvement; and the committee so thoroughly recognise this advantage, that very few patients are discharged "uncured" who have not had the benefit of such extension.

saying, that if the medical superintendent of a well-conducted private asylum were permitted to exclude all cases presenting an unfavourable aspect, the portion of cures would be considerably enhanced.

It appears from Esquirol's table, that of 2005 patients—

“Who agreed in nothing except in being cases which were presumed to be curable, 604 recovered during the first year, 497 in the second year, 71 in the third, and 46 in the seven succeeding years. The numbers cured in the second year, as compared with those in the first year, are nearly as 5 to 6; sometimes even more patients were cured in the second year than in the first: thus, in 1809, 209 patients were admitted, and of these 48 were cured in the first year, and 64 in the second year; and again in 1810, when 190 patients were admitted, 48 were cured in the first year, and 51 in the second. Such being the case, it is at once evident that the number of recoveries must be greatly affected by a rule which limits the time for recovery to a single year.

“It is not easy to estimate how much the Hospital gains in the number of recoveries from the rules which exclude complicated and incurable cases; but we learn from Esquirol that 795 incurable cases, or cases considered as incurable, were admitted, between 1804 and 1813, into the Salpêtrière, which is open to all classes of patients; and that, during the same period, (as appears in the preceding table,) 2005 patients were admitted as curable, of whom 1218 were cured. Of these 1218 patients 604 were cured in the first year, and 614 in subsequent years. In order, therefore, to arrive at any conclusion as to the influence of the rules of Bethlem upon the number of recoveries in that Institution, it is necessary to compare the number of cases which are not affected in consequence of the rule which limits the time of residence to one year, with the number of incurable or doubtful cases which, by other rules, are excluded. These, taking the experience of the Salpêtrière as a basis of calculation, will bear the proportion of 614 to 795; hence it appears that the increased chances of recovery by extending the time of residence are not quite equal to the number of doubtful or incurable cases which are excluded by the rules. The number of recoveries in Bethlem are, therefore, somewhat augmented by the rules as they at present stand.”

On the subject of mortality, Dr. Hood observes:—

“The mean annual mortality in English public Asylums, from their first establishment, up to about ten years ago, exclusive of Bethlem and St. Luke's, is estimated by Dr. Thurnam at 11·86 per cent.: viz., ‘that of County Asylums for only paupers 13·88 per cent.; that of County Asylums receiving both private and pauper patients, 10·46 per cent.; that of Asylums for patients of different classes, supported wholly or in part by charitable contributions, 8·93 per cent. The mortality of seven Scotch Asylums has been 7·52 per cent.; and that of 10 Irish District Asylums, during the comparatively short time they have been established, 8·7 per cent. Extended inquiry and consideration appear to justify our concluding, that taking considerable periods

of time, during which there have been no extraordinary disturbing circumstances in operation, in a mixed County Asylum, or in one for the middle and opulent classes, as well as paupers, a mortality which exceeds 9 or 10 per cent. is usually to be considered as decidedly unfavourable, and one which is less than 7 per cent. as highly favourable. In regard to Pauper Asylums, I believe we may conclude, under similar limitations, that a mortality which exceeds 12 or 13 per cent. is very unfavourable; and that one which is much less than 10 per cent. is highly favourable.' ”

In considering the above facts, Dr. Hood considers there is no reason for dissatisfaction, and he finds the recoveries varying so high, 51·19 per cent., death so low, 6·37. It appears the aggregate experience of the one hundred years in Bethlem Hospital, ending 31st December, 1855, represents the cures 43·05 per cent., and the deaths as 8·27 per cent.

The liability to insanity is considered to be nearly twice as great from 30 to 40 as from 50 to 60, and much more than quite as great as at any age subsequent to 60. Dr. Hood says :—

“The largest number of patients admitted into the Retreat at York, (and these not less than one-third of the whole,) were admitted between the age of 20 and 30: and there was a gradual decrease in the numbers for each subsequent decennial period of life. More cases were also admitted into the Ohio Asylum between 20 and 30; and in this respect the experience of the American Asylum agrees with that of the Retreat. This is not to be easily explained. In America it is possible that the greater freedom in the mode of living amongst the rising generation may have much to do with the matter: but this consideration can scarcely apply to the Quakers who find their way into the Retreat. In the Quakers, perhaps, the explanation may be in the care which is taken of the community—a care which will single out a case as soon as the first symptom of the malady begins to be manifested, and which does not let poverty be any hindrance to the necessary treatment. At any rate there is no reason to doubt the general conclusion which is drawn by Dr. Thurnam from the whole body of evidence; and certainly the experience in Bethlem during the last ten years is in harmony with it. Thus, in our own table, the numbers admitted between 20 and 30, and between 30 and 40, are nearly the same; 739 being admitted in the former period, and 759, an increase of 20, in the latter: and after 40 there is a gradual decrease in the numbers for each quinquennial period, 284, 242, 204, 135, 110, 72.”

According to Esquirol, the greatest number of cures were from the 25th to the 30th year, and from the 30th to the 35th year; and that they go on progressively diminishing from the 45th year to the end of life—the diminution being more uniform in men, and more abrupt in women. Recovery, however, may take place at later periods of life; and these very tables show that

twenty men recovered after the 50th year, of whom four were upwards of 70.

Speaking of this subject, Dr. Hood observes :—

“According to our own table the recoveries under 25 amount to about three-fifths of the admissions, and to about one half, between 30 and 65, if we neglect certain inconsiderable fluctuations. After 65, as might be expected, the recoveries are greatly diminished, being about one-seventh. This will be seen on referring to the table.

“The influence of age upon the number of deaths has also been carefully investigated. In our own tables the mortality, as a rule, increases rapidly with the age. Under 20, it is 4·8 per cent.; between 20 and 25, 2·5 per cent.; between 25 and 30, 3·9 per cent.; between 30 and 35, 4·5 per cent.; between 35 and 40, 8·4 per cent.; between 40 and 45, 5·6 per cent.; between 45 and 50, 7·8 per cent.; between 50 and 55, 7·8 per cent.; between 55 and 60, 8·1 per cent.; and above 60, 16·9 per cent. The mortality, as a rule, increases with the age; but under 20 it is higher than in the decennium following, and between 35 and 40 it is much higher than in the years immediately preceding and following; a curious fact, which cannot be easily explained.”

Chapter III. of Dr. Hood's work, on “sex,” contains much interesting and valuable information. He says truly that

“Esquirol investigated the subject very carefully, and concluded that women were a little *more* subject to insanity than men, the proportions being about 38 females to 37 males.”

Dr. Thurnam, however, proved that he erred in his calculations in forgetting that the proportion of adult females, in the general population, exceeds that of the males. The excess is 12 per cent. from the age of 20 to 30, 6 per cent. from 30 to 40, and 4 per cent. from 40 to 50. He also erred in comparing the *existing*, instead of the *occurring*, cases of insanity in the two sexes. This would have been a matter of no moment if the progress of the disease was the same in the two sexes, but such is not the case. The number of recoveries is greater in women than in men; and the number of deaths is nearly 50 per cent. higher in men than in women. It is therefore evident, that to compare the simple number of cases existing at any one time, would give no true result; and we must take the cases *occurring*, and not the cases existing, if we would arrive at any correct conclusion respecting the comparative liability of men and women to insanity. Dr. Thurnam was the first to direct attention to this subject; and his conclusion, after a very careful examination of the evidence, was, that men are a little more liable to insanity than women. In the principal hospitals for the insane in these kingdoms he shows, “the proportion of men admitted is nearly always higher, and in many cases much

higher, than that of women ; and as we know that the proportion of men in the general population, particularly at those ages when insanity most usually occurs, is decidedly less than that of women, we can have no grounds for doubting that the male sex is actually more liable to disorders of the mind than the female."

Again, in former years more women than men were admitted into Bethlem, as well as into St. Luke's, and the present data are in harmony with past experience:—1663 women having been admitted into Bethlem during the last ten years, and 1066 men, *i.e.*, 64 per cent. more women than men.

Dr. Hood considers that the

"Influence of sex upon recovery is supposed to be *very* marked ; and it is generally agreed that the probability of recovery is *much* greater in women than in men. But this is not the conclusion which is to be drawn from the experience of Bethlem during the 10 years under consideration, for this experience shows that 907 out of 1663, or 54.4 per cent., recover among the women, and 574 in 1066, or 53.8 per cent., among the men—a difference in favour of the women, it is true, but far more inconsiderable than that which is usually supposed to exist.

"On the other hand, it is admitted that insanity is much more likely to end in *death* in men than in women. The mortality among men, indeed, has been supposed to be nearly double that among women ; and this is a very remarkable fact, for the excess in the general mortality is not more than 5 or 6 per cent. on the side of the males. In our own tables the mortality among the men is considerably higher than among the women, but not to the extent of being double. It is 7.3 per cent. among the men, and 5.8 per cent. among the women."

In reference to the religious persuasion of patients admitted from 1845 to 1856 into Bethlem Hospital as curable, the following statistics are given :—

	Males.	Females.	Total.
Church of England	763	1251	2014
Roman Catholic	44	55	99
Wesleyan	55	86	141
Dissenter	204	271	475
	<hr/> 1066	<hr/> 1663	<hr/> 2729

Dr. Hood next considers the domestic condition of patients admitted as curable during the same period (from 1846 to 1855 inclusive).

Domestic Condition of Patients admitted as Curable.

From 1846 to 1855 inclusive.

Admitted.				Discharged.								
				Cured.			Uncured.			Died.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Married . .	545	819	1364	302	448	750	123	236	359	53	59	112
Single . . .	475	719	1194	244	399	643	169	265	434	21	30	51
Widowed . .	46	125	171	28	58	86	5	41	46	2	9	11
	1066	1663	2729	574	905	1479	297	542	839	76	98	174

Dr. Prichard considered that

“The condition of married life is, *cæteris paribus*, much less liable to the excitement of madness than that of celibacy. The proportion of married and unmarried persons in the Salpêtrière and Bicêtre, during the 20 years ending 1822, according to a report by M. Desportes, was as follows:—

	Females.	Males.
Unmarried	980	492
Married	397	201
Widowers and Widows .	291	59
Divorced	5	3
Not noted	53	9
Total . . .	1726	764

“Dr. Prichard also refers to Dr. Jacobi’s *statistics* to show that the case is the same in Germany, thus:—

	Females.	Males.
Unmarried	599	974
Married	156	176
Widowed	80	30
Total . . .	835	1180

How, asks Dr. Hood, are these numbers accounted for?

“‘Is it,’ Dr. Prichard asks, ‘through the restraints which the condition of celibacy imposes, or through the vices to which unmarried persons are more frequently abandoned? M. Esquirol is of opinion that where one case of insanity arises from the former cause, a hundred result from the latter.’ Again: ‘we must take into our calculation, that married persons lead, in general, more regular lives in all respects than the unmarried; that they are for the most part, more fixed in their pursuits and in their condition as to maintenance and employment; and that they are in a less degree subjected to causes which agitate the mind and excite strong emotions. These remarks, however, apply principally to men, and the difference observed in respect to numbers is almost equally great among females.’

“Let the explanation be what it may, the conclusion must certainly be, that marriage does not ‘predispose to insanity;’ that marriage, in short, is a natural condition. At the same time, it must be remembered, that ‘many of the cases of insanity among unmarried persons occur in a class, who, as regards bodily and mental vigour, are less likely to be married than the average of the community at large; so that in such cases the celibacy must be regarded as an *effect*, rather than as a cause of the condition predisposing to insanity.’ (Thurnam *Op. cit.*, p. 72a.)

“It is more than probable, however, that more extended inquiries may alter materially the aspect of the case as it now stands. Thus the experience of Bethlem Hospital, during the last ten years, does not support the idea that unmarried persons are more likely to become insane than the married; on the contrary, the married patients were more numerous than the unmarried, in the proportion of 1364 to 1194. The question must therefore remain in abeyance for the present; and in the meantime we may notice the manner in which the chances of recovery or death are affected, or appear to be affected, by the domestic condition of the patient. We may not attach much importance perhaps to any such deduction, but it is curious to know that these chances are not the same in the married, unmarried, and widowed state; thus among the recoveries, we find 55·7 per cent. of the married, 53·8 per cent. of the unmarried, and 50 per cent. of the widowed; and among the deaths, we find 8·2 per cent. of the married, 4·2 per cent. of the unmarried, and 6·4 per cent. of the widowed.”

With regard to the influence of social position in inducing insanity, Dr. Hood correctly says, the data are far too scanty to allow the formation of any sound opinion; and all that we can do is to notice a few salient points which present themselves on a cursory inspection of the column. It is curious, then, to notice that the medical men are nearly twice as numerous as the clergymen and lawyers, both of whom are equal in numbers; and yet this, perhaps, is what we might expect, when we consider the broken rest of the great majority of men of the medical profession: for if this broken rest is sufficient to shorten the average duration of their lives appreciably, it must also tell very

perniciously upon their mental health. Nor is it surprising that the number of schoolmasters and musicians should be so high. Under the head of schoolmasters are a large number of those generally unfortunate persons called "tutors;" which, no doubt, is a sufficient reason why schoolmasters, as a class, swell the list so considerably, for the unsatisfactory social position in which tutors are too often placed tends necessarily to fret and irritate their minds. Musicians, on the contrary, themselves more excitable than the majority of the population, may be in danger from being made "too much of," by that part of society into which they are constantly welcomed. The number of clerks is high, though not higher, perhaps, than the extent of this class would lead us to expect. Comparing the number of those engaged in *sedentary mechanical in-door pursuits*, with those engaged in *non-sedentary mechanical in-door pursuits*, we do not find any very marked difference, but the preponderance is with the latter. Among the former, the shoemakers are most numerous, and then the tailors; among the latter, are first the carpenters (including the cabinet-makers), and then the bakers. These facts are curious, explain them as we may.

Among the female patients, the only points which seem to require notice, are the very large number of governesses and dress-makers (including milliners and sempstresses). It is no wonder that an elegant, accomplished, and otherwise delicately nurtured lady, should pass from unhappiness to misery, and from misery to insanity, in a position which too often is not half so desirable as that of a domestic servant; and of the causes which operate upon thousands of the class of dressmakers, who are driven mad by penury, trouble, and perhaps remorse, it is not necessary to speak.

With reference to residence, the following facts are of interest:—

	Males.	Females.	Total.
London and its immediate neighbourhood }	421	594	1016
The Provinces	636	1048	1684
Not ascertained	9	20	29
	<hr/> 1066	<hr/> 1663	<hr/> 2729

The chapter on the assigned causes of insanity is replete with valuable matter. In speaking of hereditary predispositions, Dr. Hood remarks:—

"In the Bethlem tables the total number attributed to this cause simply, is 270 in 2729, or 10·28 per cent. among the women; and 8·3 per cent. among the men. It appears also that these cases are more unsatisfactory than the others, in so far as the chances of recovery are concerned, and less unsatisfactory in the chances of death. Thus,

while the per centage of recoveries in both sexes is 51·5 where the cause of the disorder was of a moral character, and 33·8, where the cause was of a physical character, the per centage was only 14·6 where the only cause that could be detected was hereditary predisposition; and again, while the per centages of deaths in the cases of insanity arising in moral and physical causes are 62·5 and 24·3 respectively, the per centage is only 11·8 where the disorder was simply due to hereditary predisposition.

"There is no opportunity in Bethlem of calculating the influence which the hereditary tendency to insanity has upon the liability to relapse, but there is every reason to believe that this influence is very unfavourable."

The following extract from Dr. Hood's work, relating to the *moral* causes of insanity, embracing—1. Anxiety and Distress, 2. Uncontrolled Passions and Emotions, 3. Perverted Religion, we will not attempt to abridge.

The *physical* causes of insanity are considered at length by Dr. Hood, viz., 1. Injury to the Head; 2. Disease of the Nervous System; 3. Fever; 4. Intemperance; 5. Intestinal Disorder; 6. Physical causes peculiar to Females.

Dr. Hood enters at length into all these important points. We make no apology for quoting at length from this portion of his volume:—

"The experience of Bethlem, as gathered from the tables of the ten years under consideration, shows that the cases originating in moral causes are nearly double those originating in physical causes; the numbers being 980 to 571 in 2727. It also shows that the chances of recovery are greater, and the chances of death also greater, in cases originating in *moral* causes; thus the mean per centage of recoveries in cases arising from moral causes, is 51·5, and of deaths, 62·5; whereas the mean per centage of recoveries in cases arising from physical causes is 33·8, and of deaths, 24·3. It is also curious to learn that the chances of recovery are greater, and of death also greater, in the case of men becoming insane from moral causes, the numbers being 55·3, and 74·6; whereas the women have slightly the advantage, though very slightly, where the insanity has been induced by *physical* causes.

"*Anxiety and Distress*, in their multiform aspects, appear to be the grand causes of insanity; and in the tables of Esquirol they form considerably more than one-half of the entire number of the category of moral causes. In the Bethlem table 60·2 per cent. among the men, and 70·9 per cent. among the women, may be classed more or less directly under these heads. It is very doubtful, moreover, whether insanity ever arises from causes of an opposite nature, as from excess of joy. Indeed Esquirol has the remark, that the excess of joy which destroys life never takes away the reason; and he sets himself to explain away certain cases which are supposed to support a contrary conclusion. In answer to a statement of Mead, that fortunes rapidly acquired produce insanity in England—he asks, for instance, whether the persons thus becoming lunatic may not have become so in conse-

quence of laying aside their former habits for idleness and luxury, and so on. He says, moreover, that no case of insanity which could be fairly attributed to excess of joy, has fallen under his own notice, and he mentions two cases in illustration of the mistake. A minister informs his relative of his nomination to an important place, and this relation immediately fell into a state of hypochondriacal melancholy—joy was thought to be the cause of this misfortune, but the real cause proved to be *despair* at having to quit a mistress. A young man gains a prize in a lottery, and a few days afterwards he was seized with insanity; excessive joy was thought to be the cause, but the real cause proved to be the *fear* of losing his treasure. Certainly it is no argument to the contrary, that insanity originates occasionally in ‘sudden prosperity,’ as in the six cases in the Bethlem tables; for here, *ennui* and many other analogous causes may have combined to unhinge a mind accustomed to action, and not trained to enjoy the ‘*otium cum dignitate*.’ At any rate, nothing is known of these cases to contradict the *dictum* of Esquirol.

“*Uncontrolled Passions and Emotions.*—Arguing from the statistics of Esquirol, Dr. Prichard considers that the uncontrolled passions and emotions deserve to rank next to anxiety and distress in causing insanity, but this opinion is scarcely borne out by the Bethlem tables. Jealousy is certainly not an unfrequent cause; thus we find in the ten years under consideration the insanity of 5 men and 10 women referred to it: neither is fright an unfrequent cause, particularly among the women, for 48 cases in 545 among the women, and 4 in 435 among the men, are attributed to fright; but the numbers are not so high as the statement of Dr. Prichard would lead us to expect.

“*Perverted Religion.*—The remarks which belong to this head have been anticipated on a former page; (pp. 30, &c.,) and here it only remains for us to notice the number of the cases ascribed to this cause; which are, 37 in 435 among the men, and 11 in 545 among the women. These numbers are high, but we doubt very much whether they would not be even higher, if more was known of the real history of the Bethlem patients.

“*Physical Causes.*—These causes have been thought to act more powerfully upon women than upon men, and the Bethlem tables do not contradict this idea. The difference, however, does not appear to be very great, for the per centage among the men is 19·8, and among the women 21·5.

“*Injuries to the Head.*—Accidents of this kind, as Dr. Prichard says, are more frequently causes of delirium than insanity; but instances sometimes occur in which insanity is the consequence, delirium being the intermediate link. In the Bethlem tables 17 cases among the men, and 5 among the women, are referred to ‘concussion.’

“*Diseases of the Nervous System.*—It is not easy to estimate the importance of these diseases, as causes of insanity; epilepsy is no uncommon cause, but we have no authentic data to determine the degree of frequency. The same remarks apply also to paralysis. Insanity is often referred to insolation, or coup-de-soleil; a condition which acts by exciting inflammation, or a state akin to inflammation, in the encephalon. The heat of the kitchen fire acts in the same

manner occasionally upon cooks; coup-de-soleil, indeed, and 'coup-de-feu,' as it may be called, are frequently mentioned in Esquirol's tables, and they occur not unfrequently in the Bethlem tables, in which 11 cases, all among the men, are referred to coup-de-soleil.

"*Fever*.—There is no doubt that the foundation of insanity may frequently be traced to the delirium of typhus; and that the mental malady is often connected with a metastatic inflammation of the brain and its membranes, connected with rheumatism or gout. At the same time it is not less true, that active fever and insanity must be regarded as antagonistic conditions rather than otherwise. Galen cites a case of insanity which was terminated by a quartan fever; and Belgarrie states a similar fact. M. Esquirol also tells us that he has known several instances of insanity terminated by fever, either continued or intermittent (*Op. cit.*, p. 57). Where insanity is connected with fever, it is generally by the suppression of certain cutaneous eruptions, as of small-pox, &c.

"In the Bethlem tables, the cases referred to 'fever,' are 15 among 1066 men, and 12 among 1663 women; while the cases referred to 'rheumatism,' are 8 among the men, and 4 among the women.

"*Intemperance*.—Intemperance holds a high rank among the physical causes of insanity, as set forth in the Bethlem tables: the numbers under this head being 90 out of 212 among the men, and 40 out of 359 among the women. This contrasts unfavourably with the experience of M. Esquirol, who says, that among 336 lunatics staying in his own establishment, there were only three whose derangement was ascribable to this cause; but there is every reason to believe that intemperance is far more frequently the cause of insanity in this country at the present time, than was the case in France in the days of Esquirol.

"*Sensuality*.—Here again as in the case of intemperance in stimulating drinks, it is very difficult to arrive at any correct conclusion, for want of accurate data. In the Bethlem tables, however, the mental disorder is referred to 'onanism,' in 12 cases, and to 'sensual excess' in 11 cases. M. Esquirol says that one-twentieth of the lunatics in the Salpêtrière had been prostitutes. But it is a question whether grief, and anxiety, and broken hours, may not have had a greater share in dethroning the reason than sensuality.

"*Intestinal Disorders*.—Dr. Prichard lays great stress upon intestinal disorder as a frequent cause of insanity. 'The state of the intestinal canal,' he says, 'to which I allude, is itself much more frequently of an inflammatory nature than it has generally been imagined, or at least, than it was formerly supposed to be. In that condition of the canal which gives rise to costiveness, alternating with diarrhœa, and accompanied with indigestion, flatulence, and eructations, anorexia and nausea, transient but often acute pains in the hypochondria, livid and yellow suffusions of the skin, viscid secretions in the mouth, or redness of the fauces and palate with a glazed and dry surface; the whole train of symptoms often depends upon a low degree of chronic inflammation in the mucous membrane of the intestinal canal; and this is perhaps a frequent, if not an ordinary state in those cases in which disorders of the nervous system supervene in complaints of the stomach and bowels.'

(*Op. cit.*, p. 206.) This disorder may originate in various ways, but generally in errors of diet. Worms can very rarely be traced as a cause of insanity.

"Dr. Prichard's opinion, however, is scarcely borne out by the Bethlem tables, inasmuch as the cases referred to 'dyspepsia,' are comparatively few; 14 among the men, and 5 among the women. It is not at all improbable, however, that intestinal disorder has very often been overlooked by the persons supplying the past history of the patient; indeed, the subsequent history of the patient often renders it certain that this is the case.

"*Physical Causes peculiar to Females.*—Arguing from the history of *hysteria*, we are at once prepared to expect that uterine disorder in one form or another, will prove to be a frequent cause of insanity; and such is the fact. When the process of menstruation is insufficient and painful, there are often, as is well known, symptoms which may be said to foreshadow insanity; an irritable and quarrelsome disposition, a marked waywardness, a disposition to despond, and so on; and these symptoms are still more marked where the menses are altogether suppressed: amenorrhœa, there is reason to believe, is frequently one of the causes of insanity; certainly, the menses are often suppressed in insanity, and their re-appearance is often contemporaneous with recovery.

"The importance of uterine disturbance and hysteria, as physical causes of insanity, is well shown in the Bethlem tables; for in 359 cases, 76 are referred to these causes. It is also more than probable that uterine disturbance, or hysteria, has something to do with the cases ascribed to puerperal mania, and over-lactation; and if so, then these numbers are greatly increased, and instead of being 76 in 359, they will be 238 in 359, or 63·2 per cent.

"The only general conclusion which can be drawn from a consideration of the causes of insanity, is, that they are more or less obviously of an exhausting or depressing character; a conclusion which shows indirectly, what is now generally allowed, that insanity is a disease of depression, exhaustion, and irritation."

Here we must pause, reserving for another article the continuation of our analysis of Dr. Hood's essay.

ART. V.—ON THE INCREASE OF INSANITY.

BY JOHN HAWKES, M.R.C.S.,

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THE subject under consideration is both of national and social importance; it is one, too, that, with its increasing dimensions, claims the attention of all. The fair face of England, dotted over with her many public asylums for the relief and refuge of mental disease, presents a picture of rare and painful interest to the psychologist, philanthropist, and historian. If to such an

accumulation of suffering be due, as some assert, the *apparent* increase of insanity, we may regard, not indeed lightly, but yet without particular anxiety, the existence of this mass of disease ; but, on the other hand, if it be true, as we have reason to fear, that insanity, so far from being diminished, is actually on the increase, it then no longer becomes us to assume the attitude of indifferent spectators when mischief and ruin are brooding around our hearths and beside our social altars : rather should we resolve, as rational beings, to consider by what means the present unnatural mental phenomena may best be mitigated, and to discover if by any way the dark cloud that threatens posterity may happily be turned aside. The symptoms of disordered intellect, known under the general phrase of insanity, have been familiar to the world for ages ; assuming at various times distinctive features, borrowed from the prevailing spirit of the epoch ; encouraged at different periods by some peculiar existing superstitions ; or carried as an epidemic disease, by reason of its contagious properties, from one country to another ; affording proofs of the susceptibility of the human mind to outward impressions, and painfully illustrating the weakness of our nature, with its proclivity to disease and decay. But if, from the early traditions of the world and the history of the middle ages, we learn that disorders of the mind, no less than diseases of the body, have from time immemorial dwelt among us, it may cause neither surprise nor pain to reflect that mental disease, in many aggravated forms, is still rampant in the land ; yet I doubt if ever the history of the world, or the experience of past ages, could show a larger amount of insanity than that of the present day. It seems, indeed, as if the world was moving at an advanced rate of speed proportionate to its approaching end ; as though, in this rapid race of time, increasing with each revolving century, a higher pressure is engendered on the minds of men and with this ; there appears a tendency among all classes constantly to demand higher standards of intellectual attainment, a faster speed of intellectual travelling, greater fancies, greater forces, larger means, than are commensurate with reason and health.

And is it possible that the unnatural forcing system necessary to meet the demand can be otherwise than wholesome ? Is it that, as all classes are so rapidly rising in the intellectual scale, knowledge is so generalized that individual powers are in abeyance ? or is it that those springs of intellect are dry from whence arose a Bacon, a Shakspeare, or a Newton ? Truly, "there were giants in those days." And yet we shall do well to consider if things are thus, what will the end be ? What, in short, must we expect if a progressive deterioration of mental and bodily powers be symptomatic of the age ; of succeeding ages ; perhaps of all

time? But let us trust this is not the case, though it is apparent that some physical alteration has crept over the *vis vitæ* of our own generation within the present century—a change, it may be sufficient to say, attacking the stamina of life, inducing a disposition to adynamia, and rendering necessary a departure from the former plan of treating febrile disorders. Now, it has been observed by those to whose hands are intrusted the treatment of mental disease, that these cases require the same precautions.

The raving maniac must be abundantly supplied with nutritious aliment; and as the blood recovers the elements of health, the physical frame, and its occupant, the mind, give good evidence of the efficacy of the treatment pursued. It is not my intention to follow this argument further than to point out a palpable source of many obscure phenomena occurring both in physical and psychical disease, induced by an unhealthy condition of the primary elements of life; and as bodily disorders which partake of this character are wont to leave their impress on the frame, so may we expect the same results from such as are purely mental. When this is proved to be the case, the neutral ground between the two is shortened, and we come to view them not as paradoxical, or, so to speak, polarized phenomena, but rather as intimately related the one to the other, springing up and bound together by the same unhappy laws, too often mutually dependent, near neighbours, or dwelling, alas! in the same mansion. It is a matter of no slight difficulty to determine, in all cases, the primary or predisposing cause of mental disorders, apart from an hereditary taint existing in the constitution, and where there is no positive mental deficiency from birth; for it is only too probable that, from a much earlier period than the actual manifestation of disease, the fuel has been laid; and it therefore becomes a matter of grave consideration for those who may have the power vested in their hands, not so much for the cure, but, which is of far greater import, the prevention of disease, that many carry about with them unsuspected, perhaps through a long lifetime, the dormant seeds of insanity. Waiving now the question of hereditary predisposition and congenital weakness, as before stated, there is yet a fearful balance of minds wholly free from either of the above infirmities, and yet doomed to break down and wear out prematurely in the terrible struggle of the age. Among the various classes which compose a community, there may appear at first some discrepancy in regard to the proclivity exhibited by each particular segment of society to diseases of the mind.

It might possibly be supposed that those whose means are sufficient to procure every earthly enjoyment—to whom, in short, the word want is unknown—are not likely to suffer in the same

degree as others in a humble sphere ; and yet in this particular class we find the strongest proof that hereditary honours and hereditary diseases descend together. But in seeking for other causes—as failure of bodily health, pecuniary embarrassments, over-anxiety, too great application to business, &c.—we must embrace a wider field of observation, such as is presented in the middle and lower walks of life: among those, for instance, who earn their bread by the sweat of *their brain* ; whose lives are a continual struggle, whose daily toils are unmitigated by pleasure, to whom each morrow brings fresh cares, and night scarce brings repose. The hard-worked professional man, who spends his days in painful efforts to make two ends meet ; the avaricious man of commerce, only aiming to double his gains and grind fresh profits from his wares ; the speculating capitalist, eager to lay out his treasure in the best market ; the adventurous merchant, whose temple is the counting-house. What a restless sea ! What troubled waves of thought and care rise up even within this single catalogue of callings ! But look we further. Observe the young of all classes, with what suicidal frenzy they commit themselves to sorrow. Whether, in obedience to the promptings of high ambition, weaving an entanglement of thought, and straining the sinews of the mind in attempting to achieve the gain of riper years, and to wrest the victory ere the battle has begun ; or else, led spell-bound by passion, the powers and resources of youth are squandered in the bed of the voluptuary ; sin sinking into the heart with all its accursed stains, polluting the fountains of reason at their source, and embittering the springs of life. Do we not here find predisposing causes with a vengeance, borne it may be long, but only waiting for the spark to fall ? Leaving, for the present, the consideration of insanity as affecting the upper and middle classes, let us turn our attention to that multitudinous body which, ever accumulating out of the necessary changes and chances of time and circumstances, lies in a posture of decrepitude and state of slow decay at the base of the structure on which society is reared. Under the humble appellation of “paupers” will be found persons, whose phases of existence have been spent, it is probable, in widely different spheres. Some, nurtured in the lap of luxury, have learned in their old and helpless age to taste the cup of sorrow, exchanging scenes of the broadest splendour for the straight and narrow gate of poverty. The aged and respected couple who, after years of honest toil, when the day for work has passed, are compelled to eat the parish loaf in thankful resignation ; the dissipated mechanic, once perhaps well to do, no longer able to earn a subsistence, after passing through various shades of misery, is reduced to swell their ranks. The broken-hearted widow ; the young

and helpless ; the despairing, the destitute, live under this name. It is, in fact, a class composed of the tag-end and *débris* of society at large—a formation that has settled down out of the troubled waters of life into the stagnant obscurity of a workhouse. In this division of the community, causes most frequent among the upper classes are scarcely to be found. Ambition, pride, self-aggrandisement, intellectual labour, political excitement, &c., are almost wholly wanting : but we have instead intemperance very frequent ; distress, in most cases arising from poverty ; want, insufficient food, loss of work, anxiety as to maintenance, &c.—such are some of the most common causes of insanity in the poor. There is another, and by no means a rare cause, especially in certain districts, and which I shall have occasion to allude to further on—religious distress, or excitement. It is not always so easy as it seems to distinguish between the predisposing cause and that which is the immediate precursor of the disorder, and hence named the exciting. A man, for instance, is addicted to habits of intemperance, in which he has indulged, it may be, for several years ; he is often intoxicated, more frequently, perhaps, than otherwise. At last some accident shall befall him, by which the already over-burdened nervous system receives a severe contusion ; we will suppose a blow on the skull as the most common kind of injury ; and after this the malady, long since impending, appears. Or exactly the same train of circumstances may be reversed : in this case from the blow, and consequent contusion inflicted on a healthy brain, disease is lighted up, at first probably insidious, perhaps only a slight deviation from accustomed routine, an alteration in social habits, or an eccentricity of manner never before noticed. Thus, we sometimes find a sober right-thinking man become addicted to drinking, or to frequent places of low resort ; to adopt, in short, habits which before the accident he would have entirely repudiated ; but the disease does not stop here : it is at present only incipient, but an early occasion of excess will at once draw aside the veil, and insanity in its worse form shall stand revealed. Another instance of the relation between predisposing and exciting causes may be given. A wife, of a soft, gentle, and affectionate disposition, has long been subjected to ill-treatment by her brutal husband ; she has suffered long and endured patiently all his cruelty ; at length a beloved child is taken away by death, and the mother's mind suddenly gives way ; she falls into a state of melancholia, and will probably attempt self-destruction. Such cases are not, I fear, uncommon. When dwelling briefly on the predisposition to insanity often induced by reckless or vicious habits in the more intelligent classes, it was not judged necessary to make more than a single remark on the tendency thus encouraged.

Exciting causes are always present, as surely as the flash of electric light precedes the thunder of heaven; and, if duly investigated, the predisposing cause will generally be found. Among persons of this description, whose *morale* and *physique* are alike too often below par, trifling, or even ludicrous events, will suffice for an exciting cause. Thus, a man of low tastes, which he abundantly gratifies, to the cost both of physical and pecuniary resources, finds himself, to use a common phrase, under water, and he exists—for it does not deserve the name of life—in painful and degrading poverty: so far the train of mental disease has been carefully laid. It shall happen, by an unlooked-for accident, he suddenly becomes possessed of considerable property; the means for indulging every caprice and propensity are at once in his hand; but he straightwise goes mad: it was the exciting cause. A gentleman was some time ago under my care, suffering from chronic mania, induced by taking part in a political struggle in his native town. Here there was, indeed, a strong hereditary taint; but the fatal mistake which he made in sharing the excitement of the strife, proved the immediate cause of his malady. Even when no hereditary proclivity exists, there can be no doubt a predisposition may be formed by too great a strain on the mental forces sustained for an undue period. That pure and subtle element, the mind, unlike to visible matter, endures sharp trial and weighty stress of toil full long, without betraying to common eyes the greatness of its pain and sorrow; but there must come at last an hour when nature fails, and then, alas! too late, the secret is revealed. It was thus with the gifted Chatterton; and many a child of genius, whose sun has gone down at noon, may be cited to prove the dire results of an overwrought mind. We know not—may we never learn—by what secret pangs the mind has been urged, day by day, to its fatal consummation. The memory of Kirke White will ever borrow from his mental state a shade of sadness; and in the present day this terrible truth has been lately enunciated by the untimely death of one great light of the age, the lamented Hugh Miller. It is no uncommon thing to find the most exquisitely-finished workmanship of nature's hand, alas! most prone to decay; to find a highly sensitive nervous system coincident with an active and powerful mind: the first painfully alive to every shock of the outer world, its every chord vibrating to those rude blasts that sweep, like the winds of Boreas, over the strings of an Æolian lyre; while the latter, supreme, exacting from a fragile and delicately-organized brain labours beyond its strength. Can we wonder at the consequences that ensue?

In some rare cases, where, like a strong man on a strong steed, the mind and brain are happily matched, we see with feelings

of surprise and admiration how nobly the work is done, how well the weight is borne; for through many a year it carries on over ground where others before have fallen; still it travels on. Yet the good steed tires at last; his head droops, his flank heaves, he would fain be at rest; but the rider cares not for rest—the race is not yet won, and with impatient spur he urges onward; alas! the steed is spent, it can go no further, and sinks on the track. Have we not an example of this in the latter end of Southey and Walter Scott? But a highly sensitive nervous system is not necessarily conjoined with great mental power, for we find this even in persons of very ordinary intellectual capacity; and in such cases, when the mind is deficient in that general amount of tone and vigour proper to natural health, there is, if anything, still greater reason to apprehend the decay and loss of reason. We have not here a master-hand at the helm, but the vessel rides rudderless at the mercy of the waves: naturally weak, unstable, and infirm—little calculated to war with the elements, or to join conflict in the battle of life—the poor helpless craft soon becomes a wreck; the first heavy storm shakes her to the keel, and soon the shattered hull is tossed upon the shore.

It is sometimes difficult to discriminate between the cause and effect of mental maladies; thus, it not unfrequently happens that persons, from whose psychical idiosyncrasy particular caution should be observed in their daily habits of life, are unhappily prone to take the very road to destruction. One, who has perhaps in early life exhibited a disposition to convulsive affections, as he grows up, in spite of warnings, entreaties, and example, will obstinately persist in a career which must ultimately destroy him. It would seem, indeed, as if such unhappy individuals, though at the time in apparent enjoyment of their reason and right understanding, yet lack the self-governing faculty necessary to keep them from harm. In the case supposed, when a delicate infancy is safely passed and childhood ripening into youth—when health seems firm and danger far removed—then, as though in obedience to an uncontrollable impulse, by a spell which cannot be unbound, habits are taken up and pursuits greedily followed—sensual gratification becoming the sole object of life—till *apparently* from a course, either longer or shorter, of sustained profligacy, the mind breaks down.

In this case, the cause and effect may be easily misplaced; it is an example of the difficulties attending a correct elucidation of mental disease; indeed they can hardly be overrated. So insidiously planted are the seeds of insanity, that the manner and time of sowing it is often impossible to tell. A mother may rear a healthy family of five or six children, and the seventh

shall prove an idiot from birth, or quickly lapses into a state of helpless fatuity.

Both parents may be healthy, and their ancestry, so far as is known, for too little is generally known in these matters by all parties whom it concerns. Well, the child is a mental cripple, and so he remains through life; but possibly, if the secret was discovered, it would show no fault with the forefathers of this *infelix proles*; it may have simply resulted from a transient abnormal, or at least unhealthy, condition of the mind in one or other parent, most probably the husband, nine months before birth. This affection, resulting perchance from inordinate anxiety, or intemperance, or some other weakness, has long since passed off and been forgot, but the print has been laid, the die cast, the seed sown.

On looking over most registers of causes, it will be observed that the exciting causes are more frequently chronicled than those that are simply predisposing; it is only natural that the *post hoc, ergo propter hoc*, argument should be followed in these cases; and, indeed, this is almost always the rule: such as are predisposing being often of the same kind, yet failing to produce a manifest effect are liable to pass unnoticed. In some instances no cause can be assigned; probably this often arises from ignorance and want of observation.

Anxiety occurs both as a predisposing and exciting cause; in most cases it is the latter, frequently supervening on the death of a husband, the sole support of the family, and generally arising from the difficulties that spring up to share with grief the bosom of the bereaved. Occasionally it is a predisposing cause, as anxiety to obtain a livelihood, coupled with the natural dread of poverty, a fear which, like the basilisk of old, draws its trembling victim to his doom. Poverty and want! What else could be expected? What more to the point for filling a pauper asylum?

The tendency of dissolute habits towards inducing aberration of the mind has been already mentioned; if prolonged habits of dissipation frequently predispose toward insanity, fits of intemperance prove not seldom the immediate exciting cause. There is little occasion for wonder that it should be so, when we take into consideration the peculiar influence exercised by alcohol on the general nervous system. The property which this substance possesses of inducing that delirious feeling of enjoyment that precedes absolute intoxication, together with its acknowledged virtues in restoring the failing force of life, in reviving, that is to say, the dying, and assuredly in many cases keeping death itself at bay, has gained for it such an universal ascendancy over the widely-differing tastes and habits of mankind, that it is to him

at one time a fostering nurse, at another a cheering friend, again, a powerful ally, and lastly, an oppressive and cruel enemy. It cannot be gainsaid that alcohol is a great boon; through its power of quickening nervous energy it fans, so to speak, the fading spark of life into a warm diffusive glow, and though this may prove, too often, but the expiring gleam, it affords valuable time, oh how precious! to the dying person. Its restorative virtues are daily exercised in the sick, expediting their recovery; its genial influence in wholesome moderation may cement the bands of friendship and gain a noble cause; but abused, serpent-like, it bites the heel of those who unwittingly tread thereon; not the destroying pestilence nor the invader's sword shall prove so devastating, so relentless a foe. From being a gift, hallowed by divine authority, it becomes a fearful instrument in the hands of the devil for the destruction of the human race; truly may the advocates of temperance exclaim, "if war has slain her thousands, drink has slain its tens of thousands;" no longer an emblem of peace and prosperity, it becomes the dread token of misery and crime. What more lamentable, more pitiable vice can there be, than that by which man's proudest gift, his reason, is dethroned from its high seat by a cruel and enslaving tyrant, whose end is accomplished when that reason is for ever cast out; and what words of horror and surprise can describe the height and depth of folly that invites this king of terrors to come and take possession? Intemperance is a fertile source of insanity; it is not like sorrow, or disappointment, or, in fact, any other cause which may eventually be lived down, but in the habitual drunkard burns an inward, consuming fire. When one has abandoned himself wholly to this vice, it is impossible to say he may ever recover; the more urgent symptoms of disease may indeed be subdued, and to casual observers he may seem a new man; but should he be removed from those wholesome restraints, which have of necessity been placed on his appetite, he is sure to relapse, and in the emphatic language of Scripture, "the last state of that man is worse than the first." Superstition does not appear to be so common a cause of insanity as might be supposed among the lower classes of society. The prevailing superstitions of the day—spirit-rapping, table-turning, mesmerism, and animal magnetism—exercise their baneful influence on more susceptible minds than belong to the labouring population. These are rocks in the fathomless sea of mysticism, on which many an empty head has split, and many a shallow mind been stranded; but happily in this country these causes are rare, though so frequently met with in the wards of American asylums; instances in which the precocity of intellect, the hardihood of ignorance, with the recklessness of presumption, are brought into juxtaposition

without the healthy counterpoise of sound knowledge, humility, and piety. The English mind, speculative, somewhat sceptical, but eminently practical, has turned away from such puerile fancies and silly diversions as our Transatlantic brethren have taken up and still practise. We care not to tickle our brains with such unnatural, irrational pursuits.* Society has shown herself slow to learn mere physical hygiene, and how much more that which is mental. But is not this as needful as the other? The robust, uncultivated mind may smile at the props and precautions so necessary for the highly wrought intellects of the educated and brain-tasked men of to-day, just as a wilderness, swept by the winds of heaven and unsullied by man's breath, can afford to dispense with well planned sewers and skilful officers of health, though for the closely populated town these are indispensable. And as among the crowded abodes of man, all adjuvants to sickness should carefully be expunged, so among the labyrinths of intellectual pursuit must we as sedulously remove, or at least avoid, those dangerous and insidious provocatives of disease that are broad-cast through all ranks of the people. With these few comments on the perils of vain, unphilosophical, and superstitious inquiries, I now proceed to the consideration of religious excitement, or ecstasy, in its various kinds, as a fertile source of mental derangement and decay.

A morbid state of the feelings, characterized by their transient exaltation, arising often by force of imitation, sometimes, it may be believed, involuntarily and under the unhealthy influence of intense fervour of a spiritual kind. Such is "religious excitement," as it is commonly and vaguely termed. This description of phrensy has been met with in many ages, and under widely different forms of religion. Its symptoms are very varying and inconstant; the reaction which ensues may completely overshadow the preceding excitement and render its existence doubtful; in many cases it may be questioned if the mind is really affected till the second stage of depression has set in; in others, whether the extreme excitement may not be ascribed to actual and positive insanity, passing away with the cause, and leaving the individual sane, though more prone to subsequent attacks under similar circumstances, each one less likely than its predecessor to subside, and thereby increasing with their return the danger of a settled malady. I have said in all ages the phenomena of spiritual or religious excitement have been observed. We see a similarity between the proud feat of Marcus Curtius, who "loved his Rome so well," and the self-sacrificing homage

* Since this was written, I see a paper has been started in Yorkshire, as an organ for spiritual manifestations, &c.

of the worshippers of Juggernaut; we can trace in the career of the Flagellants and the victims of the dancing mania of the middle ages, points of comparison with the whirling Dervishes and the "Ranters" of our own land. If in the dark ages and among the most benighted people religious fanaticism, or phrensy, has been most frequently observed, so may we conclude, from *a priori* reasoning, it will, in like manner, be found in certain sects no less remarkable for the wild fanaticism, gross ignorance, and unscrupulous presumption of their leaders, than for the perverse enthusiasm and mental darkness of their misguided followers. The giddy, weak-minded members of such communities, led away by the impassioned, reckless teaching of their fire-brained pastors, seek to gratify their diseased religious feelings in listening to those tumultuous bursts of language, turbid streams of blasphemy and folly, which, stimulating the hearers, excite them to those disgusting and disgraceful exhibitions of maniacal fury, that may remind us indeed of the worshippers of pagan altars, who "cried aloud and cut themselves with knives and lancets," shrieking in dreadful concert, and proclaiming with hideous cries their hopes and assurance of salvation. I have been told by eye-witnesses that some of the congregation fall senseless and convulsed, others, with their eyes lit up with the fire of insanity, prophesy, leaping on benches, while the rest, in dismal wailings and prayers, signify their wants or fears. Is it at all wonderful that actual and permanent insanity should result from these wild doings? I am sure a great part of the misery and spiritual depression among the ignorant poor arises from the pernicious teaching of ranting preachers, combined with the extravagant, unmeaning, and blasphemous form of worship common to their communities. It is a significant and very instructive fact that whereas the large bulk of the inmates of public asylums may be members of the Church of England, yet it will, I believe, generally be found, at least in my experience of two public asylums it has been so, that those suffering from religious despondency, arising from religious excitement, are most frequently, if not almost invariably, members of some dissenting body—Methodists, Wesleyans, Baptists, or those, in popular phrase, termed "Ranters."

And this terminates the notice of some of the more common, and, I believe, most important causes of insanity among the poor, from the consideration of which we arrive at the inevitable conclusion, that there are certain natural laws, however unwilling man may be to receive them, beyond or against which whosoever trespasses thereby becomes subject to penalty. The fact of physical disease being thus often induced has rendered mankind, to a degree, sensible of this rule, and, in some case, to recognise the laws of health, or those general principles by which bodily suffer-

ing and sickness may be diminished, if not altogether avoided ; but it seems a lamentable fact that so many fail to observe, or obey, those general rules of living that form the best safeguards to mental health and integrity. Thus, for instance, the student who sustains great intellectual labour too often succumbs to this mental strain for want of relieving his brain from severe thought, and renewing his bodily vigour by active physical exercise. Cases of intemperance, again, show the numerous instances in which mental disease results from debauchery in social life. The votary of pleasure in his carnival hour may delude himself he is the least likely ever to become insane, and yet the records of any asylum prove with how little impunity such a course of life can be indulged. To take another case ; the poverty-pinched and over-wrought mechanic, whose dreary hours of toil are spent from day to day in the same small, dingy room, unpurified by the breath, unillumined by the light of heaven, and when night sets in, exhausted by confinement and want of proper food, he throws himself on his wretched pallet, and prays for sleep to soothe the pangs of famine. Could this poor man be protected from those untoward influences which threaten to destroy him, both soul and body, it is possible his dark hours would be fewer, his trials less keen ; but there is no escape, and the avengers of nature's violated laws claim him at last for their victim.

When society has learned the art of preserving life and reason, we may confidently expect—though disease, whether of body or mind, will never cease to be present with us—yet its more fearful ravages shall be checked and held at bay. Even as through the Herculean exertions of humane and scientific men, those physical disorders which have in times past swept the earth like the breath of the destroying angel are now dismantled of half their terrors, and no longer permitted to go forth and destroy, so may we hope the time will come when, by the wisdom of Omniscience instructing and guiding our labours, that grim and hydra-headed monster, for which we now are content to rear costly mansions, such as few other lands can show, shall become a shadow and a name—a thing to be spoken of to our children, and to be had in memorial by our children's children in the day when they view the deserted abodes of madness and woe, and speculate on the nature and character of that terrible king for whom such palaces were designed. Well may the patriot mourn and the man of feeling sorrow to see these grisly tokens of their country's weakness rising up through the length and breadth of the land.

Let none suppose that such means, commendable though they may be for the pressing requirements of the times, will really check the spread of mental disorders. Fever wards and small-

pox hospitals may shelter the sufferers of disease, but they cannot prevent it for a day ; and after all, prevention, says the proverb, is better than cure ; but we appoint officers of public health, whose business it is to hunt out fever and contagious maladies, the offspring of ignorance and neglect, and to trace them to their lair, and to strangle them at birth : this is far better than waging a weary fight with the full-grown monster twins, disease and death. It is wiser to go to the root and to nip the evil in the bud. And now let us think for a moment how the same principles of prevention may be applied to diseases of the mind.

Individual instances of high attainment and solitary possessions, well stored with fruitful and pleasant knowledge, will not here avail. We must have unity of action, and a combination of resources among all classes of society. For as in a well-planned arch, each single stone helps to maintain the consistence of the entire structure, so in the social constitution of our country is seen a fabric, the solid base and sturdy buttress of which are formed by the stout hearts and strong arms of the mass of labouring poor, on which firm foundation are up-reared the well-polished stones, placed by the hands of the Great Architect himself, each and all in their several positions linked and bound together for mutual dependence and support, helping to sustain still higher rows of intellectual power, till the whole form an emblem of unity and strength, having Royalty for the key-stone. Until men learn the force of this truth, and recognise in obedience the principles it enjoins, we may expect to continue, as heretofore, contributing to build and fill asylums for those whose intellect has been rudely "jostled from its seat" in the angry bustle of life, unmindful how we suffer as a nation, so that as individuals we prosper,—careless if the foundations of society are sapped and destroyed, so long as we can maintain an artificial glitter in our respective places, closing, meanwhile, our eyes and ears to the miseries of those around and beneath us. Let us rather endeavour to promote mental sanitary reform, combining to introduce those changes in the social condition, more especially of the working classes, by which that high pressure system, so prejudicial to the health of the mind, shall be slackened, and the strain which it occasions relaxed. Let these people have those proper periods for repose and recreation, without which man becomes a mere machine. Let the hours of labour be abridged, and let childhood no longer share the curse of the fall. Let the multitudes who have not the means or opportunities of learning from books, be instructed by public teachers the first principles of mental as well as physical hygiene. Let them know the evils that result from ill-judged matrimonial matches, so fearfully pro-

lific of insanity; and let not the wise examples of previous ages of the world be disregarded: the healthy manly exercises of the Olympic games, foot-races, manly contests, wrestling, throwing weights, &c., should be encouraged: the training of the body thus called forth engenders a healthy tone of mind. Would that Government prizes were instituted in every township for the successful competitors in the above-mentioned and other similar sports! Would that public ground was set apart for these healthful practices and diversions! We should not then have reason to lament for the premature decay which threatens so many of the rising generation. The tonic influence of open air would brace the nervous system, and through it the mind itself, against those ensnaring and degrading vices into which the youth of our nation fall. A manly spirit of emulation would arise to preserve their stamina unspoiled, their physical resources unalloyed, and hence not to themselves only, but to their posterity would accrue the advantages of a well-trained body, with the blessing of a strong and healthy mind. That such a day may dawn, when England's sons shall learn the prowess and strength of nerve for which their forefathers were famed,—when, forsaking the tavern and gambling-table, the low haunts of vice and idleness, they shall acquire a taste for those spirited and adventurous pursuits by which not men but heroes are formed, let each one who has the power feel the responsibility, and seek without delay to bring about so desirable a consummation.

ART. VI.—THE ASYLUMS OF ITALY, GERMANY, AND FRANCE.

NOTES OF A VISIT MADE IN THE YEAR 1855.

BY JOHN T. ARLIDGE, M.B., A.B. (LOND.),

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DURING a rather lengthened tour on the continent of Europe and in the East, I took the opportunity of visiting those asylums of the different countries through which I passed, that were not too far out of my road, and made notes at the time both of the leading features in their structure, arrangement, and management, which struck my attention, and of the facts which I could gather from the physicians and others superintending them. But as the time and opportunities of observation and inquiry varied much in different cases, the account I can render of some asylums is much more incomplete than that of others. Sometimes I had the advantage of being conducted through an asylum by the medical

director or superintendent, whilst at others an assistant medical officer, an interne, or even, on a few occasions, a non-professional *employé* acted as my guide, and was often wanting in much information which I could have wished to have obtained. Another circumstance, affecting, in some instances, the completeness and utility of my narrative was that, from want of time, or some incidents of travel, my inspection was rendered too superficial and hurried to be satisfactory. Lastly, although, in a few cases, I was enabled to obtain some printed returns, containing statistics and other matters of interest, yet, in the majority of these continental institutions, no such reports are procurable, since they are made only in manuscript to Government officials, to the bureaux of the police and the like.

However, it is my duty and pleasure to state that, wherever I applied for admission to an asylum, as an English physician interested in the treatment of the insane, I was readily admitted, and treated with courtesy, indeed, in most cases, with the greatest kindness, and with the readiest will to supply me with all the information I could ask for. The friendly reception which, I may say, everywhere met me, will indeed be always remembered with the liveliest satisfaction and pleasure.

Among other matters, I much wished to acquaint myself with the lunacy laws of the several countries visited, but found it impracticable as a traveller to do so, since they are either not published apart from the general code of laws, or not procurable of any publisher, being communicated only to those specially concerned in their operation, or in some places treated like state secrets. To persons resident for a length of time in any foreign country, a knowledge of the laws regulating asylums, and the management of the person and property of lunatics, might undoubtedly be obtained by a search through their law-codes, and by communications with the directors of asylums, which might supply many useful suggestions for the amendment of our lunacy act, for the more efficient inspection of our asylums, and for securing better provision for our pauper lunatics, especially when recently attacked.

Asylums of Italy.—Information concerning the Italian asylums is very scanty; indeed, the very locality of many of them is generally unknown. That they are very much behind both in structure and management, when compared with those of the greater part of the rest of Europe, has been a statement repeated again and again since the time of Esquirol, yet few have inquired for themselves into its validity within a recent period, although nothing is more supposable than that the ameliorations carried out in other countries have also been adopted in Italy. In fact, in several parts of the Italian peninsula improvements in the

construction of asylums and in the management of the insane have been carrying on for many years, and the Italians can assume much credit to themselves for the work they have accomplished. They claim, indeed, the merit of taking the initiative in improving the condition of the insane, by employing them in manual operations, by transforming their habitations from prisons into asylums, by planting gardens for their exercise, occupation, and amusement, and, in general, by substituting plans of moral discipline, where practicable, in lieu of mechanical coercion. In these reforms the asylums of Palermo, in Sicily, and of Aversa, near Capua, appear justly to have obtained the chief merit, but the question of priority in their introduction cannot at present be examined.

The Royal Asylum of Turin.—The Royal Asylum of Turin was instituted in 1728 by the Confraternity of St. Sudario, who obtained from the king, Victor Amedeus II., the privilege to erect a building for the care and treatment of the insane, by subscriptions raised among themselves, and from the public, and to undertake the management. The site chosen was unfortunate, being at the northern angle of the city, where it is rather low and ill-drained. The first building was very limited; but by subsequent enlargements, between the years 1765 and 1820, was rendered capable of receiving fifty patients. However, its insufficiency for the increasing number of inmates, and for their proper classification and treatment, led to its abandonment, and the erection of the present asylum in 1833, from the designs of the Cavaliere Talucchi. The expenses were borne by contributions from the Government and from private donors, especially from the members of the lay brotherhood of St. Sudario, the founders of the first institution. The patients were transferred to the new building in 1834.

The government is vested in a body of sixteen directors, annually selected by the king from the brethren of St. Sudario, presided over, *ex officio*, by the Vice-President of the Piedmontese Senate. The directors are always eligible for re-election, and consequently remain in office usually for several years. Each director specially assumes to himself the supervision of some particular service, as, for instance, the economical details, the sanitary condition, or the dietary, and for this purpose attends daily at the asylum for his turn of fifteen days, when he is replaced by another. A general meeting is held every Sunday, at which propositions for reforms and improvements are submitted to consideration. The regulations of 1837 require that one physician of eminence in the city shall always be a member of the administrative board.

The paid officers consist of a rector or clerical director, a chap-

lain, a treasurer, a secretary and assistant, a chief physician, a second physician, a surgeon and two assistants, a dispenser, seven Sisters of Mercy, and inferior officers and servants. All these *employés*, except the clerical director and the surgeon, live in the institution, and the order of duties of the medical officials is so arranged, that one is always present in the house. The internal management will be more satisfactorily considered after the constructional details are gone over.

The chief physician, who has laboured in this asylum for twenty years, is Dr. Bonacossa,—an admirable example of a physician, who has his heart in his occupation, and is constantly engaged in endeavouring to alleviate and improve both the condition of the insane, and the institutions for their reception in his native land. To him I owe my best acknowledgments for his kindness and cordiality, as well as for his readiness in putting into my hands whatever information he could give me.

The present asylum retains the same situation as the one it replaced. It is built on a nearly level spot of ground, surrounded on all sides by public roads, and much overlooked by neighbouring houses, although encompassed by a high wall. In its length it extends from east to west, and consequently its chief fronts are north and south, the former being much exposed to the cold winds which blow frequently with much rigour at Turin from the snowy Alpine range within sight of the city. More than a fourth of the whole superficial area within the walls is occupied by the building itself, and hence little space is left for exercising courts or for out-door employment.

The disadvantageous site and position of the asylum, and also the want of space about it, have been forcibly set forth by M. Bonacossa in several memoirs addressed to the Government and to the Board of Directors. The deficiency of space for out-door employment has, for the last few years, been remedied by an auxiliary institution, started in the country, some few miles from Turin, where a select number of male patients are sent and employed in agricultural operations; a plan which has worked most advantageously, thanks to the enterprising physician-in-chief, and one which he hopes shortly to see extended. This gentleman, however, proceeds further in his views of reform, for he advocates the abandonment of the present building in the town, and the establishment of one in the country in its place. In this recommendation every English superintendent will coincide, especially when acquainted with the defects of the present building.

The asylum is constructed of brick, plastered or stuccoed over. Its ground plan represents two parallel lines of building, connected at the extremities by two others, at right angles to them,

and separated into two equal divisions by a central, transverse portion. This central building contains the residences of the officers and the general offices, and serves to separate the male from the female side, and is like the terminal or connecting wings of three stories, the long intermediate portions having only two. The whole edifice is also raised some three feet and upwards above the level of the soil by a vaulted sub-basement, which serves for the stowage of wood and other stores, and beneath the central portion contains the kitchen and associated offices.

From the plan of the building two distinct interior courts are formed, surrounded on all sides by the walls, access to each being provided beneath the connecting end wing, which is built upon an arch. Beneath this arch, on each side, is, moreover, the entrance to the asylum from the garden, or airing courts; a clumsy arrangement, involving the evils of an obscure, heavy, and inconvenient entry, additional stairs, and a dark and otherwise bad staircase.

These internal airing-courts are practically useless; they are too narrow—not above twenty-four feet wide—are always more or less completely in shade, and consequently rather damp; are overlooked from the corridors above, and in general dull and cheerless. They are paved with stone, and slope from the walls on each side towards the centre, for the purpose of carrying off water. The floor of the corridor of the ground-floor is some eight feet above the level of these courts, which are somewhat sunk in order to admit access from beneath the arch communicating between them and the exterior plot of ground.

This general plan of the asylum is doubtless very objectionable and fraught with inconveniences; but since its deficiencies are sufficiently evident, a glance at the most prominent will here suffice. Forming, as each half does, a hollow square, the opposite sides are so approximated that the ventilation and lighting of the wards must be considerably interfered with, and the enclosed courts always in shade and dull; at the same time, every prospect is cut off, and those dwelling on the one side looking inwards to the court can only gaze upon their neighbours opposite through the bars of the windows and corridor.

The central building is devoted to the general offices of the establishment. In the sub-basement are the kitchen and appurtenances, the wash-house and dead-room; on the basement, or ground-floor, are the chapel, dispensary, secretary's office, physician's-room, a billiard and visitors' room, and a dining-hall, or general sitting-room for tranquil patients; on the floor above is a store-room, for the distribution of bread, wine, rice, and other articles of diet, and some living rooms for officers; whilst on the

highest, or third floor, are the linen-store, or "lingerie," a work-room for women, and a laundry, constituting a department where the female patients are employed during the greater part of the day.

The asylum is entered from the south side by an open iron-gate, flanked on one side by a porter's lodge, on the other by a small office, which conducts to a portico and arched door-way, opening into a small inner court, formed by the apartments of the central building being arranged as a hollow square, having its rear occupied by the chapel. On each side the entrance-hall, a staircase ascends to the floor above.

The transverse terminal wings, joining the two principal lines of building, are also of three stories, with a sub-basement. The last is pierced at its centre by a wide arch, opening a communication between the interior court and the exercising court outside, and having on each side a staircase, ascending respectively to the anterior and posterior range of building. The ground-floor is taken up by a day-room, a bath-room, and other apartments belonging to the wards on that floor, front and back. The two floors above are occupied by the higher classes of pensioners, and have a row of chambers on each side a narrow corridor, which is consequently badly ventilated and indifferently lighted. To those pensioners who pay from 700 to 1000 francs a year, separate rooms, in some instances a living and a sleeping-room, are assigned, fairly furnished and sufficiently comfortable. Military officers pay only about 320 francs per annum, but rank in the second class of pensioners.

The remainder of the building is devoted to the poor, the annual charge for whom, including clothes, is only about 220 francs. Four-fifths of their cost are paid for by the province to which they belong, a part and even the whole sum, however, being repaid out of the means of the patient, or of his friends, where these allow it, and one-fifth contributed from the funds of the asylum.

The ground-floor on each side is divided into four dormitories, an eating or sitting-room, a few small rooms and a bath-room. The dormitories differ in size. The largest is used for the infirmary, and contains at least twenty-four beds, whilst the rest have only some eight or ten. There is besides a small room adjoining the infirmary, which serves both as a dining and sitting-room, and, like the latter, is furnished with a stove.

As originally constructed, these dormitories had a wide corridor—about eleven feet—on each side, and consequently received light and air indirectly; but one of them, M. Bonacossa, has thrown into the rooms,—a great advantage doubtless, by giving increased space, air, and light, but lessened by the intersection of

the rooms by the heavy square columns left. The retained corridor serves for communication; it runs along on the side of the enclosed court, into which it looks. Its outer wall is supported by a series of square columns, the wide spaces between which are filled up by a lattice of stout wooden bars.

There is a bath-room on this ground floor, to the anterior and posterior division, on each side. The baths are of stone, shallow, narrow, and furnished with stout wooden covers, capable of being firmly fixed down. They are four or five in number, and disposed in a radiating manner around a central column, through which they receive the water. The douche-pipes are also suspended from this column over the baths. Bathing is not resorted to for the purpose of cleanliness, but only where indicated medically, or morally—*e. g.*, as a means of repression. Prolonged baths are sometimes used with advantage to produce sleep and allay excitement. A small stream of water is usually allowed to trickle over the head during the whole time, and occasionally liniments, or ice, to the head, are employed. Cold baths are very rarely resorted to.

The first floor, or second story, consists of a wide central corridor (20–24 feet), having a series of single rooms on each side. It is lighted indirectly through the rooms, and directly by a row of semicircular windows, on either side, some distance above the rooms. This line of windows, seen from without, gives the impression of a third story, or attic; for they are placed above the level of the parapet, and so set back from the outer wall that they pierce the inner one (partitioning the single rooms from the central gallery), which is continuous upwards to the ceiling. This mode of construction gives great elevation to the exercising gallery, but its effect is dreary, and no views outside can be obtained, except through the windows of the sleeping-rooms. Moreover, the gallery being extended to the extremity of the building, through the intersecting terminal wings, which have two stories in the elevation of this corridor, its height is abruptly and seriously diminished, to about ten feet, by an arch thrown across it to support the superjacent rooms. This low pitched portion, nearly a fifth of the entire length, is badly ventilated and lighted, since there is neither an end window, nor rooms laterally through which it can receive light and air. It follows that this form of central corridor is very unsatisfactory, and, except for the purpose of in-door exercise, has no one feature to recommend it. The architect has undoubtedly perceived the disadvantages attending a corridor with rooms opening into it on each side, and to obviate them by procuring light and air directly from without, instead of second-hand through the rooms, resorted to the curious expedient of elevating it much above them. At

the same time he fell into a great mistake by continuing it through the intersecting terminal wings, and thereby produced a most clumsy interior, cut down to one-half its height by a bare heavy wall into a sort of communicating tunnel.

The walls of this gallery are plastered, and are coloured to the height of a chair-rail of a different colour, the rest being whitewashed. The whole seemed kept in very good order.

The single rooms on the first floor are about 11 feet by 9 feet, and 11 feet high, with slightly arched ceilings, and the walls plastered and whitewashed. Some rooms are slightly larger than others. Each has a window defended by ornamental iron-work outside, nearly 3 feet wide, and $4\frac{1}{2}$ feet high, and placed some 4 feet above the floor.

Each ward or gallery has its water-closet, which is of the rudest construction, and, to English senses, dirty and disgusting. It is, however, but just to say, that M. Bonacossa recognises their defects, and is anxious to have them replaced by something more sweet and decent, but he has to encounter the "*laissez-faire*" system, which suggests that they have served and may still serve their purpose, and are after a pure native model. The closet, as it existed, was really a small room with a stone floor, having one hole in it for solid excrementitious matters, and another, with a groove leading into it, for the liquid contributions; but the latter especially seemed frequently to miss their way, if we might judge from the wet condition of the floor and the odour arising from it.

Besides serving as a place of exercise, the wide corridor constitutes also the eating and sitting room for the inmates, wooden tables being placed here and there for taking the meals on, with benches and chairs.

The stairs, ascending from one floor to another, are of stone, and although their course is not spiral or winding, yet they are disposed around a central space or well, and, consequently, to render them safe, are shut off from it by upright iron bars, giving them, as in those of the Hanwell Asylum, a cage-like and very objectionable appearance. Moreover, they are but indifferently lighted by a skylight in the roof above.

The floors of all the dormitories, single and sitting or eating rooms, are laid with square tiles; those of the gallery with stone. In the floor of the bath-rooms alone is wood used.

The ground on which the asylum stands is so much occupied by it, that but a narrow strip is left before and behind it: the principal space for exercising-courts and gardens is found at each end. All the available space is made use of; one portion on each side is set apart for the refractory, and is without trees or shrubs; the remainder is divided into two gardens, laid out with

paths, turf, trees, shrubs, and flowers. A larger garden is also attached to the building on the south aspect, placed on the other side of the public road which bounds that side of it, and is reached by a tunnel passing beneath. This plot of ground was the garden of the ancient asylum. As many male patients as practicable are employed in keeping the gardens in order, but from the limited space few can obtain the advantage of out-door employment, an evil much lessened, for the last two or three years, by the acquisition of a monastery and its grounds, as an auxiliary establishment, where above 100 patients reside, and are engaged in cultivating the soil and other work.

Respecting the internal fittings, a few words will suffice. Simple iron-bedsteads, of a common pattern, are used generally throughout the asylum. For epileptics they are furnished with stuffed sides, to prevent the patients falling out during a paroxysm, and to obviate injuries. Clean patients have a flock-bed and a straw-pailasse, with sheets and a thick coverlet. For dirty patients, the bedsteads have the sides raised so that they may contain an iron or wooden tray, in which the straw upon which they lie is placed. The straw is not enclosed within a case or bag, but placed loosely in the box, and a sheet laid upon it, for Dr. Bonacossa thinks that bags prevent the urine readily running off, and therefore make the state of the bed worse. The urine drains off through a hole in the bottom of the tray, and is collected in a vessel beneath.

The drinking utensils are of pewter. The dress for the poor consists in summer of cotton, in winter of woollen cloth. No special provision is made for warming or ventilation; the cold state of some parts of the building is deplored by M. Bonacossa, who attributes to it the too frequent prevalence of disease and an increased mortality.

The internal government and management of the asylum seem very much influenced by the directors; the medical treatment being regarded as the special province of the physician. He, however, directs his attention to all the details, and is ever active in urging reforms in all matters affecting the well-being of the afflicted inmates. Yet he seems too much under the control of the directors to effect the good his experience suggests to him to be done. This indeed he himself feels, and has boldly petitioned the state authorities to place all the asylums of the country under the superintendence of a medical director. Whilst the chief physician has, in some sort, a general supervision of the institution, he shares equally with his colleague in medical duties; the one charging himself with the male, the other with the female, side of the house. They each make three visits to the patients in the course of the day,—the first early in the morning,

the second at noon, and the third in the evening. The chief has also to prepare a weekly return to the directors of every occurrence in the asylum, of the patients admitted and discharged, of the form of insanity they suffer, and to compile the statistics every three or six months. The surgeon, who is non-resident, visits daily and conducts the autopsies. The two assistant-surgeons follow the superior medical officers in their visits, perform the minor operations of surgery, supervise the administration of medicines and the diet, keep registers of the cases, &c.

Seven Sisters of Charity are engaged in the service of the asylum; three of whom superintend the laundry and clothing department, whilst the rest act as the chief nurses on the female side, where they are assisted by ten under-nurses. On the male side there are, a head and fifteen ordinary attendants, and a barber. Besides this staff, there is a nightwatch on each side. The rector has the moral control of the asylum, and with the resident chaplain conducts the religious services—viz., prayers every evening, a lecture once a week, and the sacrament at certain times to those of the patients in a condition to receive it.

In the kitchen are a head cook and two assistants. The steward, who is also the chaplain, is charged with the inspection and distribution of all the stores, and reports on the dietary, &c., to the director who presides over the economy of the house. Additional servants are, a man to keep in order the clothing of the male patients, and an under-steward or butler, who gives out the portions of food, wine, &c., for the inmates.

There are three meals per day; the first between 7 and 8 A.M., the second between 11 and 12, and the third at 6 P.M. The morning meal consists of soup and 3 oz. of bread; the mid-day meal of soup, 12 oz. of bread, and a portion of meat four times a week, with or without vegetables; on other days, the soup is made with rice or macaroni, or eaten with vegetables. The evening fare is of soup again, or of salad, with 6 oz. of bread. Besides this allowance of common bread, a little of the Turin "pipe-bread" is given in addition, and a quarter of a pint of wine mixed with water, is allowed at the principal meal. The private patients or pensioners have extra portions and a greater variety of food, regulated by their amount of payment. These take their meals separately in their own rooms, whilst the other inmates eat together in their several wards. As many as 130 sit down at meals in the division of the tranquil patients; knives are not in general use, but spoons and forks, the former of white metal for the pensioners, and of wood for the pauper inmates.

Little employment is obtainable in this asylum, particularly for the male patients. A few, as said before, are busied in the grounds, others in the wards, but there are no workshops. A

library and reading-room are provided, and also a billiard-room for the pensioners. The women are engaged in needlework, in the laundry, and in assisting in the work of the wards.

No suicide had happened for fifteen years.

Restraint is still resorted to in violent cases ; the hands being fastened together by leathern handcuffs, or attached to the waist by a belt, or a camisole is put on, and occasionally a patient is confined in his bed. Coercion, however, is limited in the greatest degree possible. Seclusion is frequently practised, sometimes in a darkened room.

The number of patients in the establishment, at the time of my visit, was 533—of these 217 were women and 316 men ; among these there were 19 epileptics—12 males and 7 females, and 13 paralytics.

In 1846, as many as 320 patients were admitted in the course of the year, of whom 14 men and 11 women were epileptic, and 18 men and 8 women paralytic.

From the faulty construction of the building, the proper classification of the inmates is impracticable. They are generally divided into the refractory and the tranquil or orderly and clean, but the epileptics, the dirty demented, and paralytic are mingled together. The deficiencies of this division are distinctly recognised by M. Bonacossa, who would add to the usual sections, one for the recently admitted and another for criminal lunatics.

In 1837, a code of regulations agreed upon required the insane to be grouped under six classes—viz., the convalescent, the maniacal, the epileptics, the quiet incurable and imbecile, monomaniacs and melancholics, and those subject to paroxysmal mania ; an elaborate division, but impracticable in the existing building.

The so-called moral treatment appears carried out in most points so far as circumstances will admit ; excitement is quieted by removal from its cause or by seclusion ; the mind is diverted and occupied by exercise in the courts and gardens, and at times by walks outside the asylum grounds by employment in the building or at its branch, by dancing, music, plays, puppets, reading, billiards, &c. ; and its moral powers exercised by the religious services and instruction daily carried on.

The medical treatment is necessarily varied by the special features of the case, but speaking of its general type, it may be called depressing. Bleeding, either general or local, according to circumstances, is practised in recent cases, chiefly of mania ; also full doses of emetics, digitalis, cherry-laurel water, hyoscyamus, and belladonna, are in constant use ; but opium is very seldom administered. Purgatives are given in melancholia, but not the very drastic sort, and repeated several times ; cauteries and setons are used in dementia. For epilepsy, zinc, indigo, cherry-

laurel water, copper, nux vomica, and strychnine, have been tried with little or no success.

Prolonged warm baths are found very useful in many recent cases, and are sometimes medicated for use. The douche is occasionally resorted to for the purpose of repression, or, in some measure, as a punishment. Shower baths are unknown.

On a review of the preceding account, it must be admitted that much credit is due to the management of the Turin Asylum. The defects in its construction are such as necessarily entail many inconveniences and evils, and unfortunately, are almost completely irremediable. The situation within the circuit of a large city, the manner in which it may be overlooked from neighbouring houses, the small space about it, the double line of building with closed ends forming a hollow square, the disposition of bed-rooms on each side a gallery, and the want of workshops and of means of warming the building in winter, are among the conditions almost or quite past remedy in the present institution, and which will always render it unfit for an asylum, more especially so for the treatment of recent cases. It is to be hoped, therefore, that M. Bonacossa's proposition to set aside the present structure, and to erect a new asylum in its stead in the country, will ere long be attended to.

It is gratifying to see the humane principles of treatment of the insane so cordially accepted in the Turin Asylum, and to know that most of the defects of the present building and of its internal management are admitted. Although personal restraint is still regarded as necessary in some cases, yet the constant endeavour is to reduce it to its minimum. The dietary to an English stomach would be considered very meagre and insufficient for health, yet it is actually somewhat superior to that obtainable by the majority of the poor in Piedmont. Nevertheless, both from *à priori* considerations regarding the depressing effects of mental disease, and the change in the mode of life of most of the inmates, the deprivation of the invigorating air of the open country, the confinement and inactive dreariness of an asylum, and from experience of the indifferent sanitary state of the establishment, the prevalence of diarrhœa, dysentery, and scurvy, M. Bonacossa very justly demands an improvement in the quality and quantity of the diet. On this subject, he further points out that the frequently fatal maladies named are especially rife among the poor who have the bare allowances prescribed, and, on the other hand, are much scarcer among the private patients whose payments secure them a more varied and substantial regimen. The scanty charge of 220 francs (9*l.* of English money) for the destitute cases is found insufficient to allow a more generous diet, and to provide superior clothing to that

which is at present supplied,—a reform much called for; it is therefore necessary that this sum should be augmented.

The thanks of those interested in the welfare of the insane are, moreover, due to M. Bonacossa for his persevering endeavours to provide employment, particularly for the male patients, by attaching land to the asylum for cultivation, and by the erection of workshops for the exercise of various trades. Another change he advocates is, that the private patients should dine at a common table instead of singly; but he does not approve of the two sexes being brought into contact with one another. We are glad, also, to quote this able physician's opinion against large asylums, which he states produce, *ceteris paribus*, much less satisfactory results than smaller ones, and he complains of the present size of his own, which is, indeed, rendered more objectionable by overcrowding. Lastly, the present number of attendants for the patients is found inadequate, being but one to fifteen; and M. Bonacossa would desire to have one to ten, and that their stipend should be greater, to secure more activity and interest in their duties.

M. Bonacossa is the author of several works on the Statistics and on the Pathology of Insanity. He understands English, and is diligent in ascertaining the prevalent doctrines respecting the management and treatment of the insane, both in this country and elsewhere. In 1838, he made a tour of inspection to several of the asylums of France, Holland, Belgium, Lombardy, and of this country, and published his notes in a small book, entitled "*Sullo Stato de' Mentecatti e degli Ospedali in varii Paesi dell' Europa.*"—Turin, 1840. In 1837, he published the Statistics of the Turin Asylum, between 1831 and 1836, under the title of "*Saggio di Statistica,*" prefacing the work by remarks on the history and government of that institution, on the classification and treatment pursued, &c. On the proposition of a new code of laws for the regulation of lunatics and lunatic asylums, he wrote a brief memoir containing comments and criticisms, suggesting amendments; but his last and most ambitious work is a treatise on mental pathology, entitled "*Elementi Teorico-Pratici di Patologia Mentale,*" printed in 1851, which we can recommend to the careful study of our readers as rich in original thought, and as conveying the results of some twenty years' reflection and experience enjoyed by the author in the Turin Royal Asylum.

From these additional sources of information, not a few interesting particulars can be advantageously collected and appended to our own notes on the asylum under consideration.

The mortality in this hospital appears very high, and is attributed by M. Bonacossa to its defective hygienic conditions; to

its position, its exposure to the cold north-west winds, and to the insufficient diet. At the same time, he would explain it in part, by the extent of the movements of its population in the course of a year—from 250 to 260 having of late been admitted yearly—and by reference to the state of health in which many patients are sent to the asylum, especially those from rural districts and from long distances, as from the province of Nice. Whatever explanations of this sort may be advanced, there is certainly a vast amount of sickness in this asylum; for, including relapses, five per cent. more cases of disease (incidental with reference to the insanity) occur than the entire number of inmates. But to revert to the ratio of deaths:—the statistical tables show, that between January 1st, 1831, and December 31st, 1836, 650 men, and 416 women, in all, 1066, were admitted; that 161 men, and 109 women, in all, 270, were cured; and that 188 men, and 140 women, in all, 328, died. Thus with reference to the number of admissions, 1 in 4 were cured, and 1 in $3\frac{1}{4}$ died; the ratio of deaths exceeding that of the cures.

According to another table, there were:—

	Admissions.	Deaths in the year.	Ratio.
In 1830	165	23	1:7 $\frac{4}{3}$
1831	149	20	1:7 $\frac{9}{10}$
1837	207	49	1:4 $\frac{11}{19}$
1843	256	52	1:4 $\frac{3}{5}$
1845	267	61	1:4 $\frac{2}{3}$

This increasing ratio of deaths with that of the admissions has been observed to be a necessary law by many asylum physicians, and if applied to the statistics of the Turin Hospital, the rate of mortality for the last two years cited should have been greater, had not some amelioration in its sanitary condition have been effected.

To show the curability of insanity when submitted to treatment soon after its outbreak, the following table is presented, which, in the facts it conveys, coincides with the results of experience of other physicians.

During the first three months after the invasion of the malady,

3 in 10 are cured.

second ditto 3 in 12 „

third ditto 3 in 13 „

fourth ditto 3 in 20 „

After the lapse of a year 3 in 33 „

The teachings of experience seem, however, equally ignored by the people of Piedmont as by those of England, for M. Bonacossa has to regret that the majority of cases admitted are of more than a year's duration, and three-fifths of the whole without prospect of cure. Still, in Piedmont, something will no doubt

be done by the central government to provide for the immediate treatment of recent cases, when its importance, as well to the state as to the interests of the afflicted patients, is placed in its proper light; whilst in our own much-lauded land of liberty, obtuse-headed magistrates will be suffered, apparently *in perpetuo*, to ignore the deductions of experience, and to persist in repeatedly enlarging asylums already greatly overgrown, which are suitable only to give safe custody to the insane, and, by depriving them of all chances of sufficient treatment, are in operation no other than manufactories of chronic insanity.

The much greater proportion of males admitted to females is remarkable; it represents three-fifths of the former to two-fifths of the latter,—the reverse of the ratio in England, France, and Belgium. Among the males, agricultural labourers rank first in the tables of the relative occurrence of insanity among different occupations; after these come priests and military men. Among other social conditions no striking diversity exists, except in the case of shoemakers, who exceed any of the rest in relative number. Of the 650 men admitted between 1831 and 1836, 233 were labourers. A similar predominance obtains among women of the same class; since, of 416 admitted, 195 were labourers, and 58 were similar in social position, viz., servants. This prevalence of the disease among the labouring classes is doubtless attributable, in a great measure, to their wretched mode of life, and their half-nourished condition, particularly in the mountainous districts, and to their ignorance and superstition.

With respect to age, the greatest number of cases occur between the thirty-fifth and fortieth year.

The unmarried, as a rule, suffer more frequently than the married; an exception, however, obtains in Piedmont, in the case of the females, of whom more married are there admitted. Hereditary predisposition was traceable in one of every four or five cases admitted. Next to this, abuse of wine and spirits follows as the most frequent cause, especially among the men; also not a few cases are attributed to pellagra, although this malady is not nearly so prevalent in Piedmont as in Lombardy. An unusually large number, in comparison with other countries, suffer from superstitious monomania, from demonomania, and with aversion to food. Epilepsy coexisted with insanity in 30 out of 557 males, and in not more than 5 of 388 females admitted. General paralysis is infrequent in Piedmont, although mania with exalted notions is commonly met with. M. Bonacossa narrates the surprise of a French physician from Charenton on recognising this circumstance in the course of a visit to the Turin asylum, he having been accustomed to look on this particular form of delusion as almost necessarily connected with paralysis.

The most prevalent forms of insanity are mania and melan-

cholia; the former very often intermittent in type, and the latter attended with excess of religious emotion, and mostly with fear of eternal punishment, and seen more frequently among women than men. A tendency to suicide exhibits itself in a fourth of the cases on their first entrance, and aversion to food is a tolerably frequent complication of melancholia. Dementia holds the third rank in relative frequency, and after that, in women, erotomania; monomania with extravagant notions follows.

Taking a period of eight years, and including in the calculated number of cases those remaining in the institution at the commencement of that period, M. Bonacossa finds the proportion of cures to have been 28 per cent.; that of discharges under all circumstances 45 per cent.; that of deaths between 35 and 36 per cent. The ratio of relapses is from 11 to 12 per cent. The average time spent in the asylum by the cured was 220 days; by those who died, 306 days; and by the inmates generally, under all circumstances, 265 days.

On looking over the table of the causes of death among the population of the asylum between January 1st, 1831, and December 31st, 1836, one is much struck with the high mortality resulting from disease of the abdominal viscera, especially of the gastro-intestinal canal. In seeking an explanation of this fact, we are at once led to assign much importance to the dietary in the first place, and to the bleak and rather damp position of the asylum in the second. Some influence must also be assigned to the vitiated air from imperfect ventilation and drainage, and to the cold of winter, inadequately mitigated in only a few apartments by stoves. The table is sufficiently interesting to extract at length.

Causes of Death.		Proportion of Deaths relative to the various Forms of Disease.	
Of the Brain and Spinal Cord	chronic myelitis	1 in	52
	meningo-arachnitis	1 —	8
	acute encephalitis	1 —	130
	encephalitis and meningitis	1 —	10
Of the Vessels .	chronic phlebitis	1 —	86
	arteritis and carditis	1 —	37
Of the Thoracic Viscera.	phthisis pulmonalis	1 —	18
	chronic pulmonic disease	1 —	18
	acute pleuro-pneumonia	1 —	86
Of the Abdominal Viscera	chronic gastro-hepatitis	1 —	37
	acute hepatitis	1 —	160
	chronic gastro-enteritis	1 —	13
	chronic cystitis	1 —	86
	acute metritis	1 —	260
	chronic metritis	1 —	130

Causes of Death.		Proportion of Deaths relative to the various Forms of Disease.	
Fluxes	{ dysentery	1 in	32
	{ diarrhœa	1 —	13
	{ ascites	1 —	52
	{ hydrothorax and hydropericar- dium together	1 —	18
Cachexies	{ hydrothorax	1 —	37
	{ hydrocephalus with meningitis .	1 —	10
	{ scurvy	1 —	65
	{ tabes mesenterica	1 —	65
Neuroses—Apo- plexies	{ serous	1 —	21
	{ sanguineous	1 —	18
External and Surgical Diseases		1 —	50

In the history of the Turin asylum the year 1837 holds a prominent place on account of the introduction, at that period, of extensive modifications in the internal management and modes of treatment; the summary of which, as detailed, furnishes an insight into the state of this institution prior to that time. As enumerated by Dr. Bonacossa, these reforms were: 1. Daily distribution of the allowances to the poor instead of only three times a week; 2. General adoption of iron bedsteads, and abolition of the old wooden ones with their apparatus of rings, chains, &c.; 3. Separation of the pensioners from the paupers; 4. New and more convenient disposition of the water-closets; 5. Construction of a commodious bath-room in every section; 6. Repairing of the floor with tiles instead of stones; 7. Altering the chamber doors to open outwards instead of into the rooms; 8. Institution of a reading-room; 9. Cultivation of the garden of the ancient hospital by the labour of the patients; 10. Two assistant-surgeons appointed in lieu of a phlebotomist; 11. One physician specially attached to the male, the other to the female division; 12. Opening of the dispensing department (pharmacy) to the public for the profit of the asylum funds. Besides these, adds the writer, many other improvements would have been brought about, had the new regulations of 1837 been acted upon with vigour.

This Royal Asylum at Turin was lately, except a small one at Alessandria, the only institution which existed in the whole of Piedmont (Genoa being a distinct province) for the reception of insane persons; and, besides doing duty for the population of this large territory, the patients belonging to the province of Nice were also sent to it. The utter insufficiency of this one institution for the claims upon it forms the subject of a paper addressed to the central government by Dr. Bonacossa, who forcibly points out the many and various evils resulting from such a state of things.

Within the last few years the regulations for the education of medical men in Sardinia require students to attend, in their fifth year of study, the clinical visits at the asylum, and a course of lectures on mental disease. It is much to be desired that this excellent and most necessary regulation should be enforced in England for all medical students; for the prevailing ignorance respecting the nature and treatment of insanity is truly deplorable.

The Asylum of Genoa.—There is a large modern asylum at Genoa at one end of the city, within the walls. It was instituted in 1834, and intended to accommodate 350 patients. It is built of stone on the radiating or panoptic plan, and has a few acres of land surrounding it, laid out in gardens and courts. It is unfortunately overlooked at some parts—particularly the wings on each side the garden, through which the central building is approached, by neighbouring houses. It is situated in a valley, but the drainage appeared good, and the soil dry. The several wings are similar; they are each of three stories, surmounted by an attic running the entire length. The central building, from which the six wings radiate, is circular, of considerable circumference and five stories in height, besides the “lingerie” immediately under the roof.

At the time of my visit there were 423 inmates under treatment; some of whom were pensioners or private patients, paying more or less liberally for their maintenance; and the rest indigent, supported at the expense of the commune to which they belonged, less the sum obtainable from their relatives in part payment.

Each floor in the wings is devoted to patients, except the terminal portions of the two at the approach from the entrance gate, which serve for the residence of the physician, the clerical director, the assistant-physician, and some other superior officers. The general arrangement is that of a central corridor, terminated at one extremity by a window, about seven feet in width, and having rooms (mostly single) opening on each side. However, its continuity as a corridor is broken at the centre of each wing, on the first and second floors, by a room extending the entire width of the wing transversely, which serves as a dining and day or sitting-room.

The single rooms, opening into the central gallery, are commodious,—about 13 feet by 11 feet, and 11 feet high, with a slightly vaulted ceiling. Each has a large window, about three feet from the ground, made to open inwards like a French casement, defended externally by an iron-framework, consisting of perpendicular iron bars, crossed by others obliquely in such a manner as to form an ornamental pattern, less offensive to the sight than the old cross-bars of this country, yet at the best giving a prison-like aspect to the chambers. The panes of glass in the casements are of good size in all the rooms occupied by

tranquil patients ; but in those for the violent the glass is replaced by wood, except at the upper part, where the only space for lighting was about fourteen inches by twelve. The same style of external iron barricade was attached to the windows throughout the building.

On the first floor of one wing, on each side, set apart for pensioners, tranquil or convalescent, the doors of the rooms have been removed ; and are replaced by curtains, which can be drawn across the open doorway, so as to give the necessary privacy. This plan increased the cheerfulness of the ward, which it, in some degree, converted into a dormitory, and must likewise have greatly improved the ventilation both by night and day, the curtains by their mode of hanging and their thinness opposing very little obstacle to the entrance and exit of air, even when drawn, which they frequently are not. Elsewhere, except to the rooms for violent cases, the doors on each side are circular headed, and, instead of being solid throughout, had their upper half filled up with a framework of wood of upright bars only. The circular top to the doors, and the employment of upright bars only, were intended to improve the appearance by obviating the usual prison-bar model ; the whole contrivance being, however, called for to secure the lighting and ventilation of the galleries, which, except by the terminal window, were otherwise unprovided for. This indirect and imperfect supply of light gives a dull aspect to the corridors ; but this Dr. Verdone (the chief physician) remarked is rather an advantage in Italy, where the light in summer is too intense to be agreeable or desirable for patients. For this reason also it is to be presumed that either a curtain was fixed across the end window of the gallery, or that Venetian shutters were placed outside it ; but, whatever the motive, this only general look-out into the surrounding garden, or country, was in nearly or quite every ward cut off ; the only other opportunity of the patients seeing the exterior of their habitation being from the windows of their rooms.

The casements of the patients' rooms seemed under their control, to open or shut at their pleasure, there being no special fastening to prevent it. However, the danger of a leap or a fall from them is removed by the iron guard outside. The floors were everywhere of tile or stone, and the walls whitewashed, except for about four feet from the floor, where they were coloured in imitation of granite, or of some other ornamental stone. At some parts the walls were painted in distemper with trees, flowers, &c., according to a taste very prevalent in Genoa. The doors entering the corridors are of wood, and solid. Each corridor is entered from the central building, and has no communication with any other, except by the common stair outside it.

Besides single rooms, most of the wards possessed a dormitory,

capable of accommodating some ten patients. In the refractory quarter the doors of the single rooms are solid. A few of them were lined with iron-plates, for the purpose of strength and security, and had a small window for light placed high up out of the patient's reach. There was no padded room in the asylum. Dr. Verdoni had constructed one for experiment, but was dissatisfied with it, and gave it up.

The staircases, which are constructed in the central building, are winding; the one leading to the fourth story is, moreover, badly lighted and inconvenient. The fourth story, or third floor, differs in arrangement from the wards below. It is divided into a number of dormitories by transverse partitions, and being within the span of the roof, the ceiling, for part of the way on each side, is shelving. The rooms do not occupy the entire span of the roof, since, in order to gain sufficient elevation, even for the beds, the walls are brought forward from the junction of the roof with the outer walls, four feet or more on each side; hence a sort of horizontal shaft extends the entire length of this floor, on either side, which was turned to the purpose of ventilation. To attain this purpose, small holes were opened from the rooms into this shaft, originally of about three inches square, placed just above the floor. The present medical director has improved upon this, by bringing air from the exterior, instead of from this closed shaft, by extending a square wooden tube across the intervening passage, through the external wall. The tube, about eighteen inches by nine inches, has a septum across it of coarse wire-gauze, intended as a regulator of the current of air admitted, and, with this view, capable of being raised or lowered by a string passing over a pulley, and worked from the dormitory.

But, whatever schemes be resorted to, with a view to improvement, this floor will ever remain an unfit habitation for patients. Situated immediately beneath the roof, the heat of the rooms in summer must always be almost intolerable and unhealthy, whilst the windows, being placed high up in the slope of the roof, deny to the inmates all view, except of the sky, and have a most objectionable appearance, aggravated by their smallness. In fine weather the sun must shine through them with oppressive intensity, and in foul weather they will, like all sky-lights, be subject to many inconveniences.

The dormitories, which open one into another, are under eleven feet in height at the highest part, and contain from six to eight beds each. There was also on this floor a small room, serving as a day and dining room for a portion of the patients. These last were mostly chronic demented cases, but few were habitually dirty in their habits, much care being used to prevent this. The water-closets here, as elsewhere, smelt badly, and were in bad order.

The small rooms, which on the floors inhabited by the pensioners serve only for one patient, are in the other wards occupied by paupers, frequently made to serve for two, an arrangement which cannot be too much condemned, for a variety of reasons not necessary to detail to our readers.

The wards on the ground floor set apart for refractory patients and for epileptics, are deficient in light, gloomy, and not so clean as desirable. Some rooms on this floor were converted into workshops for tailors, shoemakers, carpenters, &c.

The central circular building consists of five stories, the highest of which is appropriated to the linen-room (*lingerie*), and is very well and orderly kept, under the superintendence of a Sister of Charity. The floor beneath is divided into a number of rooms for pensioners, and also contains a billiard-room. The ground floor is occupied by the entrance hall, by a room for receiving visitors to patients, an office for the physician, one for the steward, by the kitchen, &c. Above are the chapel, a common room for general purposes, a store-room, &c.

From the central hall on the ground floor, a door opens on either side, which admits into a smaller hall from which the doors of the several wings on that side open, and give access to the stairs ascending to the various floors above. An inscription appears over the principal entrance of the asylum stating its purpose, in which the insane are oddly enough called "Helleborosi."

From the plan of the asylum, the airing-courts have a triangular figure; two sides being formed by the contiguous diverging radii of the building, and the third or base by a high wall. In two courts an enclosed, partially glazed, wide corridor extends two-thirds the length of the base, intended as a place of exercise in bad weather, and furnished with stone benches; its utility, however, is very limited, and it will probably be removed before long. The airing courts are planted with trees, and most of them also laid out as gardens, with shrubs and flowers. The space entered from the lodge, in approaching the asylum, is larger than the rest, but being overlooked by neighbouring houses, is of little advantage to the patients.

No special contrivance for heating and ventilating the building exists; indeed, the few stoves placed here and there cannot sufficiently warm it in winter; and this season at Geneva is not wanting in severity, especially when, as frequently happens, the northerly winds blow strongly and bitterly over the city.

Respecting the internal fittings and arrangements, there is little to note. Iron bedsteads are generally adopted, made as usual, of stout iron rod, with a head and a foot-piece, and low sides. These sides serve only to contain the thick paillasse, except in the case of bedsteads for epileptics and some paralytics;

in which they are much higher, moving up and down on hinges, to serve as a defence against the patients falling out during a fit. The elevated sides, like the head and foot-pieces, are formed by an upper horizontal rod, from which vertical rods descend to the framework of the bedstead. Where patients have thrown themselves about much, and exposed themselves to injury from the enclosing sides and ends, these have been covered or padded, in order to obviate it; with these precautions no accident had occurred.

The bedding consists of a paillasse, a flock bed, sheets, a woollen coverlet, and mostly a coloured cotton counterpane. This provision is made for clean patients: for the dirty, an iron box, fitted to the framework of the bedstead, is filled with loose straw, and a sheet laid upon the top, on the same plan as at Turin: a strong coarse woollen coverlet is placed over the patient. None of the patients were, as before stated, constantly dirty in their habits, but these straw troughs were assigned to such as were prone to be so. Lastly, for destructive and violent cases, some wooden cribs or trough-bedsteads were provided, furnished with iron rings for fastening the straps used as coercive means in certain cases.

Mechanical coercion is applied by the camisole, by the waist-belt, and by leathern hand-cuffs. It is used in violent cases from the apprehension of mischief and injury to others; also for destructive and for suicidal patients; for the last, especially at night. Many of those under restraint by the camisole are also kept in bed, attached to it by belts fastened to the arms, legs, or waist. This mode of management Dr. Verdoni prefers to seclusion, believing it much more beneficial to the patient. He would, at the same time, always endeavour to lessen its application and diminish its severity as much as possible, and continue it no longer than absolutely required. The total abolition of mechanical restraint, the use of knives at meals, the mixing together of the two sexes, whether for amusement or religious worship, are, in his opinion and phrase, mere *tours de force*—or as translated—mere knavish tricks to dazzle the eyes and astonish the public.

There is no provision of lavatories for personal cleanliness: in fact, I could not find out that in this, or indeed, in almost any continental asylum, it was deemed at all necessary that patients should habitually wash themselves. The idea of an English wash-hand basin has yet to be realized, and even its accessories, soap and towels, rarely find a place in the *toilettes* of foreign asylums. It seems to be thought enough, *i. e.*, where any such provision is thought of at all, to fix here and there in the building a small vessel of water, holding a gallon, or somewhat more of water, furnished with a tap like that of a tea-urn, and called a "robinet." The effectiveness of a washing from such an appa-

ratus may be conceived ; the wetting of the hands and the bespattering of the face with an ounce or two of water, making the patient clean every whit in the estimation of himself and fellows. This arrangement is nevertheless a shade better than the old German model plan of ablution, *viz.*, a glass of water, used *primo loco*, to wash the mouth ; *secundo*, to smear over the face ; and *tertio*, to damp the fingers, to be dried at the pleasure of the performer with his handkerchief or the tail of his shirt.

However, it is due to the directors of the Genoa Asylum to state that "robinets" were there more numerous than in some other similar institutions ; for besides one in each ward, the water-closets generally were furnished also with one ; a provision highly commendable when the habits of the people in such conveniencies are considered. It is also right to state that the present medical director recognises the want of more attention to personal cleanliness, and proposes to employ general baths to attain this desideratum.

Knives are not allowed to any patients, but only forks of white metal, and spoons. The denial of knives in this, as in many other continental asylums, will be less felt as a disadvantage than it would be in English institutions, since soup forms the staple article of diet, and when meat constitutes a part, it is usually so much cooked, that a spoon and fork may readily divide it.

The pensioners have each a single room, which is more or less furnished, according to the class they belong to, and the amount of their payment. The furniture consists mainly of a couple of chairs, a night table, a common table, a looking-glass, occasionally drawers for clothes, the bedstead, &c. Books are allowed to many of them, and a billiard table is provided for their amusement. They also engage themselves with drawing, painting, &c., and are permitted, within certain limits, to ornament their rooms, and to amuse themselves with music. The internal economy of the establishment is conducted, under the superintendence of the chief physician and his assistant, by a steward and butler, or pantry-man, and a staff of Sisters of Charity, acting as upper attendants over a number of subordinates, not *religieuses*. A night watch is kept by two attendants, who sit up all night, and perambulate the building, one on each side.

Three meals are served daily ; a breakfast of soup made with vegetables, *legumes*, &c., but not with meat, and a portion of bread ; a mid-day dinner of soup made with meat, vegetables, and bread ; and a supper, again of soup, not of meat, but of rice or *legumes*, with an allowance of bread. The dietary is superior to that at Turin, and hence diarrhœa and scorbutic affections are less prevalent and fatal.

A large number of the inmates is employed; the men in cultivating and keeping the gardens and exercising courts, in assisting in the wards, in various mechanical trades, and in artistic work; the women in needlework, in repairing and making articles of dress, in washing, in assisting in the *lingerie*, and wards, &c.

A few patients are allowed out of the asylum, in company with attendants, to make purchases in the town, to bring home articles for use, &c.

Among the indigent patients, probably from the insufficiency of the monetary allowance for their maintenance, many were ragged and disorderly in dress, and neglected in person, some without shoes, and many without covering to the head.

Baths are used where medically indicated, and sometimes as a means of repression. For the latter purpose, the douche is more frequently employed where there is violence and excitement to be overcome, or where food is obstinately refused. The œsophageal sound is avoided wherever possible; the use of one spoon to open the mouth and of another to administer the food frequently succeeds. A good plan, which I saw put into operation in the case of a woman who believed evils of the direst sort would overwhelm her and others if she ate anything—is to open the mouth with a spoon, and then, breaking across an egg, lightly boiled, and still warm, to throw its contents well back into the throat, the nose being held in the meanwhile. By this means a supply of good nutriment may be administered as often as required; whilst a repetition of it—which would be resisted successfully only in exceptional cases, a few times would generally suffice to overcome the opposition of the patient to taking nourishment; for it is well known that when such a patient recognises the ability of the physician to surmount his resistance to food, he usually gives in before this power has been many times displayed.

Besides the physician and assistant-physician, there is also an apothecary to dispense the medicines, assist in keeping the registers, and in other minor details of management. There is besides a resident chaplain, who performs daily religious service, and ministers to the sick and dying. The wards, moreover, are open to clinical pupils, and instruction by lectures on the pathology and treatment of insanity are regularly given.

The number of patients at the time of my visit was 423; of which the males were the more numerous. Dr. Verdoni counted only 5 epileptic males and the same number of females, and only 4 paralytics, 2 of whom had been recently admitted. Pellagra, so rife in Lombardy, is here, as at Turin, rare: one case had recently died. In the decade between 1828 and 1838, 1738 individuals were admitted into the asylum, and the mortality stood at 37 per cent.

Criminal lunatics are received, and are found very embarrassing inmates among the rest of the population.

On a review of the impressions received on my visit to this asylum of Genoa, I must confess them to be in many respects unfavourable. The *tout ensemble* of the building on approaching it, is in aspect that of a large prison: the radiating or panoptical system of construction is, to my mind, fraught with disadvantages and discomforts. Ventilation is rendered more imperfect; the view from any portion is impeded by the neighbouring wings, and is limited and cheerless; the airing-courts are bad in figure, most of them always more or less completely in the shade, and, unless the wings are much extended in length, and at the same time of few stories, are too small to furnish exercising space for their inmates; whilst the rooms situated on each side the apex of the triangle of the divergent wings, are too near to be well lighted and ventilated. These objections need not be here extended; for they are generally recognised, and few advocates of this figure of building are to be found. The central corridor, with rooms opening on each side, is another objectionable feature in the structure of the Genoa Asylum. Much may be justly urged against a third story to an asylum, but the fourth existing in this one at Genoa, cannot be too severely condemned; it is not bad only from its elevation, but from its most faulty structure and arrangement; its position immediately beneath the roof, and within its span; its consequent shelving sides, and skylight windows; the deficient amount of air, the heat which must prevail during summer, the disposition of the dormitories whereby one is the passage to another; these defects and others, which a little reflection would suggest, are such as should lead to the abandonment of this story.

It would have been much more gratifying to have reported the readiness of the chief physician to fairly and thoroughly try the more gentle and humane system of treatment practised in Great Britain and America, and to a great extent in France and some of the best managed German asylums; but unfortunately Dr. Verdone appears to have a certain amount of prejudice against it, and consequently cannot justly appreciate its objects and advantages. That personal coercion can be so largely laid aside as reported, seems a circumstance of such doubtful complexion, that he cannot rid himself of the suspicion of a trick, nor cease to believe that it must be resorted to under another name. He has tried a padded room for a short time, in some fashion, and has been discouraged by the results obtained; and he has got the notion that the madmen he would variously fasten with straps and belts are, in non-restraint asylums, condemned to solitary confinement within a padded cell for an almost unlimited period, and as a result of the isolation are made worse. Entertaining the suspicions and fears

heretofore held concerning the insane state, he has a horror of the two sexes encountering each other, and can imagine nought but ill consequences to both when they do. His opinions and practice in the treatment of insanity are in a curious hybrid state; he is just in the same position as the last race of superintendents of English asylums, when the changes at Lincoln and Hanwell were the talk of the day; every one then had such heaps of experience and practical illustrations to prove Conolly and his colleagues rash innovators,—theorists, or even (humbugs), gulling the public with their tales of homicidal maniacs at large, eating their dinners with knives, and handling edge-tools in their trades; every one knew there must be something behind the scenes; that it was all very well if half-a-dozen attendants could be put in charge of one patient, and that the cost of the destructive propensities of the patients fortunately came out of the rate-payers' pockets; or that at least no really genuine cases of violence, such as they had to manage, fell into the hands of the innovators. But these, and a score of other difficulties, doubts, and scepticisms vanished as opportunities occurred for the objectors to view matters for themselves, and to watch the development of the plan in one and another asylum. And in like manner, I doubt not, M. Verdone would lose his suspicions and let go his objections, could he see the non-restraint system in regular operation, and put himself *au courant* with the experience of British and American alienist physicians.

In conclusion, it must be a matter of regret that the Asylum of Genoa is of so recent foundation, the cost of its construction for a comparatively poor state so large, the pains taken in selecting and working out its plan so great, and the national pride in the building so considerable, that there can be no hope of seeing it replaced by another better placed in the country, and better constructed for the purposes it has to fulfil.

Unfortunately I could not obtain any statistical record of the Genoese Asylum; to complete my present paper I will therefore record a few remarks on the prevalence of insanity in Piedmont. In this small kingdom there are but four asylums in existence—those at Turin and Genoa, described, one at Alessandria, and one near Chambery. That at Alessandria I did not see, but understood that it was very indifferent as a building, small, and to be replaced by a new one. The asylum near Chambery, in Savoy, was of an equally indifferent character, being an old monastery, adapted as well as might be to its novel purpose. It contained but few patients, and a new asylum was building in the neighbourhood, under the superintendence of Dr. Duclos, to more adequately meet the wants of the province. In the large island of Sardinia no provision whatever existed for the insane, who were

either the objects of fear and superstition, or the victims of harshness and cruelty, shut up in prisons, dispersed in monasteries, in hospitals, and in hospices for the vagrant poor; but alike everywhere the subjects of neglect and ill-treatment.

The proportion of insane cases, known in the asylums and elsewhere in Piedmont, as calculated by Dr. Bonacossa, is one in about every 2000 of the population; and in Savoy, according to M. Duclos, 1 in 1700. This proportion in each of these two provinces is small, more remarkably so in that of Piedmont. Between 1828 and 1838, 1738 patients were admitted into the provincial asylum of Genoa, from a population of about 580,000; whilst in the asylums of Turin and Alessandria together only 1948 were admitted, although the population of the provinces from which they receive patients is four-fifths larger than that of the Genoese territory. This circumstance M. Bonacossa believes to be explicable, in a great measure, from the difficulty of obtaining admission into the Piedmontese institutions, on account of their relative smallness, and their utter inadequacy to supply the requirements of the insane population of the extended territory for which they are the appointed receptacles. In the several provinces of Piedmont proper, *i. e.*, excluding Savoy, Genoa, and Nice, M. Bonacossa takes the number 1440 to represent the insane population requiring accommodation in asylums, and to meet this requirement proposes four new institutions, each capable of holding 300 patients; viz., one for the division of Turin, a second for that of Alessandria, a third for Novara, and a fourth for that of Cuneo. One is very much required for the province of Nice, the present plan of sending patients thence all the way to Turin, being open to the most serious objections, whether the well-being of the afflicted themselves, or the cost to the public be considered. In Savoy, as already noted, the necessity for a proper asylum has been admitted, and is by this time fully met.

M. Bini furnishes some additions to the foregoing account of the lunatic population of Piedmont, in his valuable statistical report (*Saggio di Statistica del R. Manicomio di Firenze*, 1854). He tells us that the careful inquiries of a Royal Commission, nominated by the King of Sardinia in 1845, show that in Piedmont alone, in a population of 2,651,106, there existed 7084 Cretins, or 2.67 to every 1000 inhabitants. If, now, he remarks, the number of the insane be added to that of the Cretins, the proportion of persons of unsound mind in Piedmont will exceed that met with in Norway and Scotland, where statistics indicate a prevalence of mental disease beyond that in other European countries.

In my next communication I shall be able to present the provisions of the law introduced into the Sardinian Parliament in 1849, for the care and treatment of lunatics.

ART. VII.—POPULAR PSYCHOLOGICAL LITERATURE.

AMONGST the various causes which have given so immense an impulse to the study of psychology, both normal and morbid, during the last few years, there is none which ranks higher, whether as an evidence or a cause of progress, than the ever increasing interchange of thought and observation between the two great classes of students who view mental phenomena from its two aspects of health and disease. The investigator of the laws of thought now sees clearly that his labour is lightened, and his results widened in extent and importance, by accepting as elements in his calculations data derived from the morbid or modified tendencies of mind ; even as the true nature of many vegetable and animal developments is only to be recognised by a consideration of their extreme or *monstrous* forms. In sensual, perceptive, or emotional exaggerations, he is able to see the essential bearings of facts, otherwise probably overlooked, or neglected as of small importance. On the other hand, the mental *pathologist*,—he who contemplates mind chiefly through its disordered functions, must acknowledge, that a knowledge of the normal, is an essential element towards the correct appreciation of the abnormal ; he thereby computes the nature and amount of aberration ; and what is perhaps of more importance, he can calculate how much healthy *mind-material* is left in any given case ; and as a corollary, he may approximately conjecture what is the probability that this healthy remainder will act favourably and therapeutically upon the disturbed functions—and thus enhance the prospect of success in the application of the “moral treatment” of insanity.

The great and important questions connected with morbid psychology, are no longer now confined to the profession ; nor are those who devote themselves to their elucidation in theory and practice, looked upon with suspicion by the public ; each recognises the paramount interest attached to the elucidation of such inquiries as—What is insanity ? What is responsibility ? What are the boundaries between physiological and pathological mental manifestations ? What are the distinctions between eccentricity and aberration ? What is the rational treatment for intellectual disorder ? Truly important and difficult are such questions ; it may be, that we are still far from being able to give satisfactory replies ; that between reason and unreason, there is an extensive neutral ground, unclassified, unannexed ; that many points of treatment are still obscure or *sub judice* ; that an entirely new canon of responsibility is required, differing almost altogether from that now applied, all this may be ; yet progress is made, and in one very important respect, viz., that the sym-

pathy and attention of the public is gained; and instead of active opposition or passive resistance, there is now evinced a readiness to assist; or if that be impossible, to give an earnest thoughtful attention to such considerations as may be suggested. A certain sign of this growing interest, is to be found in the frequency with which allied subjects are selected for discussion in the leading periodicals of the day. It is curious to see how, without the publication of any special recent works of general interest, or the excitement attached to any remarkable case or question before the public mind, a very great proportion of the journals of the April quarter have able articles upon some subject very nearly connected with this inquiry. Thinking it of importance, from time to time, to notice the popular estimate of such matters, we propose to analyse briefly two or three of the principal papers of late appearance, with as copious extracts as our limits will allow. The able writer of the article on Lunatic Asylums, in the April number of the *Quarterly Review*, dwells at great length upon the substitution of *moral* treatment for that of *physical force* amongst the insane, contrasting the state of matters when Horace Walpole spoke in one breath of the "lions of the Tower" and the "madmen out of Bedlam," with the orderly, cheerful, almost happy communities, which now in many places represent the asylums for the insane. Some of the introductory observations are very important, as bearing upon the necessity for the *early treatment* of mental disorder; considerations, the ignorance or neglect of which, lead to such serious statistical results as to cure.

Yet in spite of the ameliorations in the condition of the insane, many among the higher, and nearly all among the lower classes, still look upon the county asylum as the Bluebeard's cupboard of the neighbourhood. These unfounded ideas act as a *powerful drawback to the successful treatment of insanity*; for as the vast majority of cures are effected within three months of the original attack, whatever deters the friends of the patient from bringing him under regimen at the earliest possible moment, *probably ensures the perpetuation of the disease*. We can well imagine the undefined awe and tribulation of spirit with which the unhappy creatures who are stricken in mind, enter the gates of an abode in which they are supposed to be given over to a duration worse than death; but so mistaken is the impression, that the feelings of desperation are *almost immediately* succeeded by the inspiring dawns of hope.

"The furious maniac who arrives at Colney Hatch or Hanwell in a cart, or a hand-barrow, bound with ropes like a frantic animal, the terror of his friends and himself, is no sooner within the building which imagination invests with such terrors, than half his miseries

cease. The ropes cut, he stands up once more free from restraint, kind words are spoken to him, he is soothed by a bath, and if still violent, the padded room, which offers no aggravating mechanical or personal resistance, calms his fury, and sleep, which has so long been a stranger to him, visits him the first night which he spends in the dreaded asylum. . . . In the old plan, the entire treatment seemed to consist in secluding the patient from every sight which renders life sweet, and in wrenching him violently from all the conditions which formerly surrounded him; the new idea is to bring within the walls as much of the outside world as possible. Here the artisan finds employment in various handicrafts, the agricultural labourer renews his commerce with the soil, and the female plies her needle, or pursues her accustomed occupations in the laundry or the kitchen. Amusement takes its turn, and those who travel by the Great Western train on winter evenings, are surprised to see the lights streaming from the great hall of Hanwell, and to hear perchance the sounds of music. These issue from the *ball-room* of the establishment."

We can scarcely attach too great an importance to the promulgation of facts and opinions like these, through the medium of so influential an organ. Nothing can be better calculated to sweep away all remaining prejudices from the mind of the public, in reference to the isolation of the insane in such establishments. The balls which have been alluded to are a very modern feature, and a very interesting one in the treatment of mental affections. They are part of one great plan of occupation and amusement; and distracting the mind from dwelling upon itself, and its own sorrows. Colney Hatch every Monday night presents a singular spectacle. About 200 of the patients are assembled in the assembly-room—males and females together—some of them are musicians, and play for the company—some dance, and some play whist—in all this there is no disorder, nor anything which would indicate that the company were lunatics; the uniform of grey alone lends an air of incongruity to the otherwise lively scene.

"Amongst the merriest dancers in Sir Roger de Coverley was a man who believed himself to be our Saviour, and who wore in his hair a spike, in imitation of the crown of thorns; and one of the keenest whist players was an old lady, who, whilst her partner was dealing, privately assured us that she had been dead these three years; and desired as a favour that we would use our influence with the surgeon to persuade him to cut off her head."*

These balls are attended with the great advantage of allowing to some extent the association of the sexes; for no life can approximate to normal sociality where the isolation is preserved inviolate. In this particular we are much in advance of our con-

* Quarterly Review, p. 575.

tinental brethren ; for although balls and other amusements are practised very extensively, the sexes are not allowed to mix at all. Such at least is the case at Stephansfeld, a large and excellent institution some leagues from the Rhine, near Bramath, an interesting account of which is given by M. Paul Janot, in the *Revue des Deux Mondes* for April 15th. Here, the balls are for the women alone, "the mixture of the sexes being rigorously forbidden." M. Janot remarks upon the general aspect of this ball room :—

"We sometimes hear exaggerated the appearance of reason which the insane present. I have even read somewhere the account of a ball at which the author was present, and passed half the night without knowing that he was amongst the insane. Certainly this mistake would have been difficult in the modest ball at which I was present. There is no disorder—the result of good discipline ; but certain signs sufficiently indicate that the society is not *sane*. It is not disorder—it is sadness ; it is not extravagance—it is silence. The contraction of the countenance, a certain *désaccord* in the dress, the monotony of the movements, many exterior signs betray the disorder of thought, and scarcely permit a mistake to be made."

The Bethlehem Hospital is thus noticed in the *Quarterly Review*:—

"No cases of 'more than twelve months' standing are admitted within the walls of Bedlam, and only 90 persons termed incurables are allowed to remain beyond that period. These regulations exclude the idiotic and epileptic patients, who form such distressing groups in other establishments, and the interest required to obtain admission into this amply endowed charity, insures at the same time a much higher class of inmates. Clergymen, barristers, governesses, literary men, artists, and military and naval officers, make up the staple of the assembly. There is a ball on the first Monday in every month, and the company that gathers in the crystal chamber, at the extreme end of the south wing, would not disgrace in behaviour and appearance any sane and well-bred community. The polka, the waltz, and the mazurka, performed with grace and ease, declare the social standing of the assembly ; and many a pedestrian who sees the dark silhouettes of the dancers, as they whirl across the light, is astonished at the festivities of the inmates. In the summer evenings, the spacious courts are crowded with the patients, not gloomily walking between four dismal walls, in which the very air seems under restraint, but enjoying themselves in the bowling-green or in the skittle-alley. When we contrast the condition of the Bethlehem of fifty years ago with the Bethlehem of to-day, we see at a glance what a gulf has been leaped in half a century—a gulf on one side of which we see man like a demon torturing his unfortunate fellows ; on the other like a ministering angel carrying out the all-powerful law of love."

Music, painting, reading, conversation for the men ; every variety of needlework for the women, "dividing their attention

with the young lady who reads aloud 'David Copperfield' or 'Dred;' such are the occupations of the patients at Bethlehem. At Colney Hatch and Hanwell, refinement in treatment is not carried to the same extent; there is the same kindness and rationality; but whilst in the former, a quarter of a million sterling has been expended principally upon the outside of the building, "not a sixpence can be spared to adorn the walls within, with either picture, bust, or even the commonest cottage decoration. This is the vice which pervades the majority of county asylums lately erected."

The question of restraint is very temperately discussed in the article from which we have quoted so largely. The writer cannot "from a fancied apprehension of the return to obsolete practices join in the fanaticism which forbids the use of the strait-jacket, as a means of coercion under all circumstances. There can be no doubt that the treatment which requires its frequent use is a bad one; but to deny that there are cases which call for its restraints would be to deny the evidence of our senses."

What is to be done with criminal lunatics? A very difficult problem is this to solve. At present their dens appear to be the only remains of the old system of treatment. Their dens consist of "dismal, arched corridors, feebly lit at either end by a single window in double irons, and divided in the middle by gratings more like those which enclose the fiercer carnivora at the Zoological Gardens, than anything we have elsewhere seen employed for the detention of afflicted humanity."

"Here fifty male lunatics are herded together, without regard to their previous social or moral condition. Thus the unfortunate clergyman, the Rev. Hugh Willoughby, who fired a pistol two years since at the judge of the Central Criminal Court, is herded with the plebeian perpetrator of some horrible murder. Side by side with the unfortunate Captain Johnson of the ship *Tory*, who in a fit of extraordinary excitement during a mutiny on board his vessel, cut down some of his crew, but is now perfectly sane, sits perhaps the ruffian who murdered the warder in cold blood at Coldbath-fields—a villain brought in mad by a tender-hearted jury, who shrunk from the responsibility of hanging him. Here also poor Dad, the artist, who killed his father whilst labouring under a sudden paroxysm of insanity, is obliged to weave his fine fancies on the canvas amidst the most revolting conversation and the most brutal behaviour. The disgrace of thus caging-up together the coarse and the gentle, the virtuous and the abandoned, rests wholly upon the shoulders of the Home Secretary. It is proposed to build a special asylum for all the state lunatics; steps are being taken, we believe, to effect this necessary change; but unless Parliament puts its pressure upon the Home-office, we shall expect to see the arrangement completed when the Nelson column is finished, and not before."

On the subject of the town or country location for hospitals

devoted to the cure of mental affections, there are more observations, which, though correct enough, do not appear to exhaust all the considerations that ought to have weight in the decision.

The writer* opposes the removal of Bethlehem Hospital into the country, on many grounds—that agricultural pursuits are neither necessary nor desirable for the class of patients contained there—that the sights and sounds of the metropolis, which they are now enabled to enjoy, afford them more recreation than wading through ploughed fields, or taking a turn at spade husbandry—that mental affections are often sudden seizures, and require prompt aid, as well as the frightful casualties of the streets requiring surgical aid.

“It would not, perhaps, be undesirable to add to Bethlehem some small rural establishment, answering to the *succursales* of foreign lunatic asylums; but this should be strictly an appendage, to which patients should be sent for a short time, for change of air and scene, just as all the world now and then take a trip to the country to refresh the wearied eye with the sight of green trees and fields, and to cure that moral scurvy contracted by perpetually dwelling upon the dismal vistas of blackened bricks which constitute metropolitan prospects.”

It cannot be doubted that there are certain advantages derivable from a town location for hospitals of all kinds, not excluding even those devoted to mental affections; but against these considerations, it must be remembered that the conditions of life and health are much more unfavourable in city districts than in those of the open country. As deduced from the reports of the Registrar General, the mortality of equal populations in towns and country districts, is about in the proportion of 2 or $2\frac{1}{2}$ in the former, to 1 in the latter; if we take the metropolis, and compare it with some of the districts of the southern counties, the disproportion is still more striking. On further analysing the statistics, it may clearly be demonstrated that affections of the nervous system afford even more than their full or legitimate quota to the production of this excessive mortality in towns. It needs, apparently, then, no argument to prove, that as mental alienation is but one form, perhaps the culminating form in which the effect of degenerating influences is manifested—and as these influences are shown to be especially rife in cities—so the prospect of being able to counteract these effects will (*cæteris paribus*) be in proportion greater, as the individual affected can be removed from the sphere of their operation. Doubtless many other elements must enter into the solution of so extensive a question; but of these, such statistical considerations as the preceding must by no means be esteemed the least urgent. M. Paul Janot speaks very decidedly on this point:—

"Nothing is insignificant in the construction or constitution of an asylum for the insane. Everything ought to be prepared to remove false associations, to suggest true ones, to soothe and annul painful and irritating impressions, and to favour the development of pleasant and serene emotions. In this point of view, one of the first and most essential conditions is *a situation in the country, and in good free air*. This is one of the advantages of the house of Stephansfeld; it is surrounded by fields and forests; enclosed in a garden, the limits of which are ingeniously concealed. The view is vast and beautiful; there are no mighty and sombre mountain aspects, such as strike the imagination of the artist or the poet; but which would be very imperfectly suited to the disordered mind; but everywhere nature is smiling but *ordinary*. What is especially salutary, however, is not so much the beauty of the site, to which the eye soon becomes habituated, but the insensible influence of an open and pure atmosphere."

After dwelling at considerable length upon the internal economy of the public asylums, in a manner eminently calculated to remove from the mind of general readers any ideas prejudicial to such institutions; the writer in the Quarterly proceeds to notice the condition of private establishments for the insane.

"The licensed houses in the metropolitan district directly under the control of the Lunacy Commissioners, amounting to forty-one in number, represent without doubt the fairest specimens of these establishments. Liable as they are at any moment to the inspection of the Commissioners, and presided over, as many of them are by the most eminent members of the profession, they are generally maintained in a high state of efficiency. They are principally devoted to the cure of the higher classes of the community, and afford, perhaps, the nearest approach yet made to a perfect method of treatment, being conducted in most cases on the principle of a private family. The bolts, bars, high walls, and dismal airing-courts of the public asylum are either unknown, or so hidden as no longer to irritate the susceptible mind of the lunatic. The unwise division of the sexes is rarely adopted. Scrupulous attention to dress and all the forms of polite society are enjoined alike for their own sake, and as a method of interesting the patients in the daily life of the community. When we partook of the hospitalities of one of these establishments, we could detect nothing in the countenances or the appearances of the guests which was characteristic of their condition—the restless eye, the incoherent conversation, the sudden movement of the peculiarly formed head, which our preconceived notions led us to expect, were none of them observable. One individual there was, indeed, whom we mentally concluded to be certainly mad. Yet, singular to say, this gentleman was the only sane individual in the room besides ourselves and the medical superintendent; and on further acquaintance, having told our ill-placed suspicions, he frankly confessed that he had in his own mind paid ourselves a similar compliment. The eager glance of curiosity natural to inquisitive strangers, was the nearest approach in this lunatic party to the outward appearance of lunacy. So much for the 'unmistakeable counte-

nance' of the insane! It is not to be supposed that the more violent can be allowed this social freedom even in private establishments, or that madness is different in a metropolitan licensed house from what it is in a public asylum; but we unhesitatingly assert that, in the vast majority of cases, the large amount of freedom, and the absence of any prison-like characteristics have an undoubted effect, not only in calming the mind of the patient, but in expediting his recovery. Hence the percentage of cures in a high-class private asylum are immeasurably beyond those of any public establishment. The pleasure ground, out-of-door games, carriage and riding parties, billiards, whist, and evening parties, all contribute their aid in restoring the unhinged mind. We have seen four or five patients leave the doors of one of these licensed metropolitan houses, and remain out for hours, without any attendant; their word of *honour* being the only tie existing between them and the asylum."

With reference to coercion or restraint, it appears that we are far in advance of our continental brethren; a statement fully proved by reference to Dr. Webster's statistics recently published in this journal. The writer adds:—

"When the beneficent thought struck the great Pinel to knock off the fetters of the English captain, he sounded a note which reverberated through Europe, and the poor insane captives issued from their dungeons in which they had been so long immured, as the prisoners emerge from their prison to the divine strains of Beethoven's 'Fidelio.' But when this vast step was accomplished there still remained an immense amount of coercion scarcely less injurious than the old darkness and chains, and to Englishmen is mainly due the credit of abolishing it. Nor shall we rest where we are. It is our belief, as well as our hope, that before another generation has gone by, the last vestige of restraint, in the shape of dismal airing-courts, and outside walls, which serve to wound the spirit rather than to enslave the limbs, will pass for ever from among us, and only be remembered with the hobbles and manacles of the past."

The last subject treated upon in this able paper refers to the alleged increase of lunacy:—

"It has been asserted by some psychologists that lunacy is on the increase, and that its rapid development of late years has been consequent upon the increased activity of the national mind. This statement is certainly startling, and calculated to arrest the attention of all thoughtful men. Is it true that civilisation has called to life a monster such as that which appalled Frankenstein? Is it a necessity of progress that it shall ever be accompanied by that fearful black rider which, like despair, sits behind it? Does mental development mean increased mental decay? If these questions were truly answered in the affirmative, we might indeed sigh for the golden time when

'Wild in woods the noble savage ran,'

for it would be clear that the nearer humanity strove to attain towards

divine perfection, the more it was retrograding towards a state inferior to that of the brute creation. A patient examination, however, of the question entirely negatives such a conclusion."

The line of argument adopted is, that were such the case, the principal sufferers should be found in those classes of society which are in the van of civilization—amongst bankers, great speculators, merchants, engineers, statesmen, philosophers, and men of letters—those who work with their brain rather than hands. Such increase then would naturally be sought for in *private* asylums, which are especially adapted to the upper classes of patients; yet between 1847 and 1855, notwithstanding the increase of population, there was a positive decrease of 96 in the entire numbers—from 4649 to 4557; whilst in the public or pauper lunatic asylums, the reports indicate an increase of 64 per cent., during the same period.

"These figures, if they mean anything, prove that it is not the intellect of the country that breeds insanity, but its ignorance, as it cannot be for one moment contended that the great movements now taking place in the world originate with the labouring classes. . . . If we required further proof of the groundless nature of the alarm that mental anxiety was destroying the national mind, we should find it in the well-ascertained fact that the proportion of lunatics is greater among females than males. It may also be urged that Quakers, who pride themselves on the sedateness of their conduct, furnish much more than their share; but for this singular result, their system of intermarriage is doubtless much to blame. . . . Still the fact remains that within a period of eight years, an increase of sixty-four per cent. took place in our pauper lunatic asylums. These figures, however, afford no more proof of the increase of pauper lunatics than the increase of criminal convictions since the introduction of a milder code of laws, and the appointment of the new police, afford a proof of increased crime. Medical practitioners of late years have taken a far more comprehensive as well as scientific view of insanity than formerly; and many forms of the disease now fall under their care, that were previously overlooked, when no man was considered mad unless he raved, or was an idiot. But the great cause of the increase of lunatics in our asylums is to be ascribed to the erection of the asylums themselves. These establishments, in which restraint, speaking in the ordinary acceptance of the term, is unknown, and in which the inmates are always treated with humanity, have drained the land of a lunatic population which before was scattered among villages or workhouses, amounting, according to the computation of the Commissioners, to upwards of 10,500—just as the deep wells of the metropolitan brewers have drained for miles around the shallow wells of the neighbourhood in which they are situated."

There is no stronger evidence of the increasing hold gained upon the public mind by a conviction of the importance of ques-

tions connected with morbid psychology, than its commencing recognition as an essential element in forming a true judgment concerning morals, habits, and certain phases of quasi-religious development. Though the time has for ever passed away when crazy old women were burnt or drowned as witches—though it is no longer the fashion to see in every case of raving mania, demoniacal possession, even amongst the rigorous spiritualists—yet it is still very frequently the case that influences and results of a purely physical nature, as hallucinations of eye or ear, visions and audible voices are mistaken for revelations or temptations; and that depressed or exalted conditions of the nervous system which have a clearly demonstrable natural cause, are viewed as sureties of some spiritual blessing, or threats of utter spiritual ruin. Errors of this nature can but be sources of injury to true religion; and it is with especial pleasure that we notice any attempt, emanating from whatever source, to correct them—to show that states of ecstasy are no more to be viewed as marks of supernatural divine favour, than deep despondency is to be considered as a sign of reprobation; and to indicate the very important part played by the physical part of our nature when it trenches upon the psychical. The *London Quarterly Review*, a journal in close connexion with, and published under the auspices of, a very numerous and highly influential religious body, has dared boldly to advocate these principles; and in an able article, entitled “Insanity, Disease, and Religion,” has ventured to assert the claims of the body to consideration, even in questions hitherto considered essentially spiritual, in a manner eminently calculated to lead to more correct views of many phases of mind, and to remove stumbling-blocks from the paths of many sincerely pious, though not very scientific people; although the writer will doubtless appear, to those who allow *reason* no share in judging of revelation, as venturing too far towards materialism. We propose to give some copious extracts from this paper, as indicative of the present state and future prospects of this particular branch of popular psychology. It must be premised that one principal object of the writer is to combat the notion that religion is a frequent cause of insanity.

“Before proceeding to illustrate supposed cases of religious insanity, we will show how the spiritual condition is influenced by disorders of the body. . . . The comfort and efficiency of the intellect, nay, the moral perception, manliness, and virtue of the mind, depend greatly on our use of aliment; and in the very means by which we sustain the strength of the body, or most directly disorder its functions, we at the same time either fortify or disable the brain. It is of course known that the physical nature of man depends upon his food; but it is less known how much his moral nature depends upon the physical; or what

changes in the temper and disposition are produced by physical influences. . . . It has been said, and probably with truth, that food has a higher bearing on the mind than on the physical frame of man. It has been shown experimentally that the mind can only exert its powers through the instrumentality of the bodily organs. . . . And from the doctrine deducible from such facts as these, it follows that every fresh inroad upon the mind, every example of amentia, delusion, or insanity is connected with some corresponding change in the condition of the body.* Dr. Cheyne remarks, that he never 'saw a case of mental derangement, even when traceable to a moral career, in which there was not reason to believe that bodily disease could have been detected before the earliest aberration had an opportunity offered for examination;' and the same highly religious and scientific authority adds, 'not only does every deranged state of the intellectual faculties and the natural affections depend upon bodily disease, but also derangements of the *religious and moral sentiments* originate in diseases of the body.' Hence it can be explained that the sinking of despair is not more dreadful or extreme than the hopelessness which depends merely upon the diseases of the *nervous system*. . . . Perhaps it may startle some to be told that even *the conscience*, which is popularly supposed to be the faculty most of all independent of physical causes, is yet affected by health and disease. Facts, however, seem to place this theory beyond dispute. Examples are found in such as indulge excessively in the use of ardent spirits, opium, tobacco, and other narcotics, which become insensibly attractive, partly from habit, and partly from *loss of mental energy*, caused by their acting injuriously on the nervous system. It is also known to be matter of daily observation by persons whose profession throws them in the way of such cases, that men who were originally honourable and honest become false and dishonest through habits of intemperance, and at last have their consciences deadened, as if seared with a red hot iron. . . . That the conscience is more or less active according to the condition of the body is illustrated by the state of the latter when exhausted by pain or sickness, or even fatigue; the conscience is then less sensitive, and in that half dreamy state that precedes sleep, especially after great fatigue, trains of thought or lines of conduct, are allowed to pass through the mind in review, which would be at once rejected were the body in vigour and the conscience on the alert. . . .

"In proceeding to give a few sketches of insanity, in supposed connexion with religion, in the hope of aiding the inexperienced guide, it is obvious to remark, that the forms of *its approaches* chiefly require to be understood, as the confirmed disease itself lies wholly beyond his department. The following case will illustrate the value of this kind of information, which we believe would be wholly mistaken, and

* It will of course be understood that in giving these quotations, we in no way pledge ourselves to the precise scientific views adopted therein. They are given simply as an illustration of the popular tendency of the present time, and of the growing disposition to allow certain opinions due weight. The article in question is, we believe, written by a non-professional scribe—the more valuable on that account for the present purpose.

treated with erroneous measures, by one who had not been initiated in the theory we are propounding: 'Such a state as mine you are probably unacquainted with, notwithstanding all your experience. I am not conscious of the suspension or decay of any of the powers of my mind. I am as well able as ever I was to attend to my business; my family suppose me in health; yet the horrors of a madhouse are staring me in the face. I am a martyr to a species of persecution from within, which is becoming intolerable. I am urged to say the most shocking things, blasphemous and obscene words are ever on the tip of my tongue; hitherto, thank God, I have been enabled to resist; but I often think I must yield at the last, and then I shall be disgraced and ruined for ever. I solemnly assure you, that I hear a voice which seems to be within me, prompting me to utter what I should turn with disgust from if spoken by another. If I were not afraid you would smile, I should say there is no accounting for these extraordinary articulate whisperings, but by supposing that an evil spirit has obtained possession of me for the time. My state is so wretched, that compared with what I suffer, pain or sickness would appear but trifling evils.'

"A somewhat similar case occurred within our own experience, with which religion was so mixed up as to lead to a suspicion of demoniacal possession. We visited the person almost daily for many weeks, and had to listen to the same sorrowful account of her temptations to utter blasphemous words and oaths, and of her struggles to repel the most impure suggestions. The case proved to be strictly a medical one, as we told her from the first; though it gave ample opportunities for instruction and warning afterwards. . . . The object of citing these and similar cases is to verify the medical opinion, that mental derangements are invariably connected with bodily disorder; and that the Christian teacher has but little encouragement to put Divine truth before a melancholic or hypochondriacal person, until the bodily disease with which the mental delusion is connected is removed."

We can scarcely overrate the importance of the tendency manifested by observations such as these, emanating from the very midst of a body of eminently pious and devoted men, who have hitherto manifested perhaps too great a reluctance to take any views of such questions except those which had a most strictly spiritual bearing. The remarks that follow form a just corollary.

"Hence it is clear that a case is often referred to religious despair, which in truth is to be accounted for by the absence of the controlling influences of religious principles. The Christian who is ignorant of the laws by which the human body and mind are hedged in, or careless of observing them, may easily bring on diseases which will tend to render the conscience obtuse, destroy hope, and cut short his days, or deprive him of his reason. For religion frees not its most ardent votary from the yoke of physical laws. If for the sake of subduing the flesh, or of obedience to ecclesiastical discipline, extreme fasting is practised, the penalty will be exacted at some time, as the

premature death by consumption of many an enthusiastic female has proved. And just in the same manner, if the true servant of God, disregarding the laws of the body, tasks it beyond its powers, even for the noblest ends, premature decay or dissolution will be the penalty. And the literary man goes to his work under the same unalterable conditions. The brain of every man is constituted to perform a certain amount of labour only, without receiving injury; and therefore all beyond this must entail evils which it is plain from analogy, may accumulate by repetition until its ruin follows.* Abuses of the laws of the digestive organs will in the same way accumulate by repetitions, until this instrument, by which life is built up, becomes virtually destroyed, or unequal to its necessary functions."

We will close our extracts from this paper by the following remarks on those illusions or hallucinations which occasionally attend the close of life :—

"Another example of the effect of disordered functions is not uncommon to the visitant of the dying chamber. We ourselves have had to listen to it as a proof of the soul's safety in death, that during the night the sick sleeper saw beautiful sights of waters and gardens, and heard angelic melodies. The experienced physician at once confidently consigns such cases to the class of delusions to be accounted for by physical laws. Far stronger claims than the above to what after all, if they be true, must amount to a divine revelation, are confidently referred to delusions of the senses. It is certain, however, that lasting moral changes have occasionally followed such scenes (as in the remarkable case which resulted in the conversion of Col. Gardiner); and a very high authority, Jonathan Edwards, aware of the difficulty they presented to some minds, but confident of their natural origin, states his judgment thus: 'It is possible that such suggestions may be the occasional or accidental cause of gracious affections; for so may a mistake and a delusion.' This decision seems to place such cases on their true footing. We feel we are treading on dangerous ground; but the facility of the abuse of such airy nothings as dreams, which every night must produce in myriads, involving awful dangers to the immortal soul, is so great, from the natural credulity of the human mind, and from its preference for such cheap evidence to the more costly but only true evidence of real repentance, trust in Christ, and the indwelling influences of the Holy Spirit, witnessed by change of life and conversation, that we deem it needful to be able to speak with confidence and decision. In cases, however, in which a spiritual guide may feel confident that an hypothesis of demoniacal possession is wrongly assumed, and that the beautiful sights and angelic sounds are of the earth earthy, the difficulty will still remain, how to convince the poor deluded sufferer, that both the anguish and the joy are alike without a spiritual basis. In particular cases, however, this has been effectually accomplished by explaining the causes which harass the sight during

* We believe these observations have special bearing upon the melancholy end of Hugh Miller.

disease; that sparks, flashes of fire, haloes, and the like, are produced by disorders of the optic nerve or the brain; and that discordant noises or articulate sounds depend solely upon accelerated circulation through the brain or affections of the auditory nerve. By medical treatment and clear explanations of natural causes and effects, persons who supposed themselves demoniacally possessed—given over to Satan,—have been relieved from excruciating perplexities. Or, as it has been more tersely expressed, ‘Cure the cholera, and the choleric operations of the devil will cease.’”

The “Irish Quarterly Review” deals elaborately with “Suicide, its Motives and Mysteries,” but our limits do not permit us to enter into any analysis of the paper. This is of the less consequence, as the illustrations are for the most part drawn from cases which have already been detailed in these pages.

Nor can we at present notice more fully M. Paul Janot’s very interesting account of the asylum at Stephansfeld. He takes occasion to inquire into the relations between reason and insanity,—how much of the former remains to some extent unimpaired even in confirmed cases of the latter—in a manner highly philosophical, and worthy of future attention.

But we cannot close a paper in which so much has been said on the subject of the mild and benevolent treatment of the insane, without glancing at the reverse picture,—the treatment of lunatics in Scotland, as developed in the “Report of the Scottish Lunacy Commission.” Our notice is extracted from the leading articles in the “Times” for May 30th and June 1st, as we could not, by any words of our own, bring the subject more fully and impressively before our readers.

“The old-fashioned treatment of lunatics, as developed in the ‘Report of the Scottish Lunacy Commission,’ was brought before the House of Commons last night by Mr. E. Ellice. This system is happily so obsolete in this country that we rank it with the barbarisms of the middle ages. Handcuffs, leg-locks, gloves, straps, and strait-waistcoats are as antiquated weapons to use in the warfare against insanity as bows and arrows are in common war. But, according to this Report, and according to Mr. E. Ellice, this is still the main system in use in Scotland. It is indeed surprising to see how completely a mere arbitrary boundary line stops the advance of an important improvement; and yet Scotland, with its great medical school, is the last country in the world where we should have expected such barbarisms to be maintained; for the new treatment of the insane, though a benevolent movement in some degree, is mainly a medical discovery. Scientific men discovered that the old system was a mistake—that madness was not to be met by such remedies; and the new system grew up as any other medical improvement might—such as the new mode of treating fever. As the old established seat, then, of medical science, why did not Scotland take the lead in this discovery, instead

of being, as the fact turns out, the very last even to take advantage of it when it has been made?

"The institutions called 'chartered asylums' in Scotland seem tolerably free from this charge. The Commissioners, indeed, object to the 'cage-like' appearance of these structures, which are 'enclosed externally by strong wire or light ironwork.' They object to their 'long galleries radiating from the central staircase,' and recommend 'more simple and ordinary buildings for the poor, having a more domestic aspect and arrangement.' The very sensible language of the Report, indeed, on this point, deserves to be quoted:—

"'There is little doubt that to be near home, and to be surrounded with homely objects, in dwellings having a domestic character, and affording opportunities for ordinary daily occupation in household work, by arrangements familiar to them at home, are grateful to the feelings of poor patients, who generally prefer an inferior description of accommodation of this kind to the spacious galleries provided in some of the public asylums. In such plain domestic buildings a more contented frame of mind is likely to arise. These apparently trifling arrangements assume a degree of importance when it is considered that by recalling past impressions, awakening deadened sympathies, and reviving former habits and customs, they may become the means of arresting the aberration of a diseased mind and of restoring it to healthy action.'

"These chartered asylums use the expedient of seclusion too much; but they appear to have dropped the coarser weapons of the old system. The 'licensed houses,' however, retain the old coarse system of instrumental restraint. These are establishments set up by persons as private speculations, and often, as the Commission complains, by unfit persons, the Sheriff not seldom giving licences to men who have no professional knowledge of the subject. The keeper of one of these establishments at Musselburgh had been a 'victual dealer,' another had been an 'unsuccessful baker,' another had been a 'gardener,' another 'a woman who had kept a public-house.' Instrumental restraint is in very general use in these houses, and is applied to private patients as well as pauper ones. 'There are houses in which some of the paupers are kept constantly manacled.' The straitwaistcoat is in daily use. 'In almost every house we found,' say the Commissioners, 'handcuffs, leg-locks, gloves, straps, and straitwaistcoats, and these not in the custody of the proprietor or medical attendant, but hanging up in the wards.' The Commissioners discovered that the patients were 'restrained by means of manacles, fastening the arms behind the back, and also to rings fixed in the wall.' The seclusion-room comes in as supplementary to this system. 'In the Barony workhouse a very narrow slit admitted light and fresh air into three rooms, which were thus close, dark, and offensive.' The patient in seclusion lies on a mattress on the floor, or on loose straw covered by a sheet.

"The sole motive, of course, in setting up these establishments is profit, and 'the accommodation of the greatest possible number at the smallest outlay' is the great aim. There is consequently overcrowding, with an absence of proper separation of male and female patients.

'Most of the pauper houses have no day-rooms, the patients when not in the airing-grounds occupying their crowded sleeping-rooms during the day,' and some which have day-rooms hardly furnish them. In very few are there any single rooms for the separation of the epileptic, noisy, or refractory. Even the upper class of patients are often miserably lodged:—

"Two male patients were confined in Hill-end Asylum, near Greenock; both had occupied respectable positions in life, and the payments made for them were respectively 53*l.* and 35*l.* per annum. At the time of our visit they shared a small bedroom with a third patient, and for months had slept together, entirely naked, in a miserable trough bed, upon a quantity of loose straw.'

"The dormitories of these over-crowded establishments are, of course, abominable; and whereas in Lanarkshire the Sheriff had fixed 800 cubic feet of air as the *minimum* allowance for each patient, the allowance in some cases is only 200, and the average is only 300—and this with hardly ever any arrangement for ventilation other than the natural outlets of the room afford, and even these not used. 'The windows, even in summer, are almost always closed during the night, and the fireplaces are generally boarded up, so that ventilation is impossible.' Very few of these establishments possess a warm bath, and even the ordinary washing accommodation is exceedingly defective. 'Frequently there are no basins, and the patients wash in tubs, or at the pump; but in some cases it seemed doubtful whether they washed above once or twice a week.' In Lilybank this tub was placed 'in a damp shed, which served also for the deadhouse.' The table linen was often extremely dirty, and in some houses the patients 'were served in their sleeping-rooms, taking their food in a basin, and tearing it with their fingers.' These establishments also are grievously deficient in space, and do not give room for necessary exercise and amusement. Everybody knows what important ingredients these are in the good treatment of insanity, and that the want of them is fatal. 'Yet the grounds for 60, 70, 80, or 90 patients rarely exceed one acre in extent, while there is seldom any attempt made to provide the men with any kind of work or amusement.

"Such is the picture which Mr. E. Ellice, relying upon this Report, gives of the present treatment of lunatics in Scotland—a country which, though blest with two Church Establishments, a body of stipendiary Sheriffs, and a judicial Bench quite out of proportion to the work it has to discharge, seems to have known nothing of these abominations. The disclosures of this Report will be received with surprise and indignation by the English public, which has been now so long accustomed to a better system, and which will, we trust, insist on immediate legislation to remove a practice which is a stain on the character of Scotland and a disgrace to our common humanity."

June 1st:—

"The remarks which we have made apply in some degree to all treatment of the insane in Scotland, those of the better as well as those of the lowest classes. The Scotch public has not yet caught the true

aspect in which insanity should be regarded, and, this being the case no system of supervision and inspection could ever substantially improve their treatment of the insane. Any Board of Supervision would be stopped by the thickness of the material they had to deal with and the passive resistance of ignorance and rudeness. The Board of Supervision at Edinburgh of course depends upon the reports of agents in the districts, upon subordinate officials on the spot, Poor Law officers, and parochial Boards. But these local authorities are under the same vulgar influences which affect the class they have to control. They see no particular harm in these cases, and neither report them to the Board nor take any steps to correct them themselves. Thus the whole work is left to the natural temper and ideas of the people.

The only arrangement which can work any real reform in the treatment of the insane in Scotland is the establishment of county and borough lunatic asylums there, to be supported by rates, as in this country. This will not only furnish places under regular scientific management for the reception of the insane, but it will do what is the great thing wanted—give the Scotch a new idea about insanity and its treatment, and thus raise the standard of treatment even in private asylums. The existing chartered asylums are too few to have this general effect.”

These statements carry with them their own comment. The facts to which they relate are only able to exist in darkness—their revelation will, we feel assured, be speedily followed by their amendment.

ART VIII.—SPENCER'S PSYCHOLOGY.*

THE work to which the above heading refers, is divided into four parts, and the peculiarity—we may say originality—of its aim, appears from the first paragraph of the preface, in which the author states that each part consists of a “different view of the same great aggregate of phenomena,” and is independent and complete in itself, though related intimately to all the rest; and the reader is left to his own course as to which part he may best commence with, after he is acquainted with the main drift of each part separately. The parts are entitled—“General Analysis,” “Special Analysis,” “General Synthesis,” and “Special Synthesis.”

The “General Analysis” is an inquiry into the basis of our intelligence, with the view of ascertaining, in the language of the author, “the fundamental peculiarity of all modes of consciousness constituting knowledge proper—knowledge of the highest validity.” The ‘Special Analysis’ has for its aim to resolve each

* “The Principles of Psychology:” by Herbert Spencer. Longmans. 1855.

species of cognition into its simplest and ultimate components or constituents. Both these analytical parts of the work relate to human intelligence, merely and subjectively. In the synthetical part, Mr. Spencer proposes an object which sounds more hazardous—to “deal with the phenomena of intelligence, not human only, but under every form.” We much regret, both for our sake and the author’s, that the state of his health prevented his writing a “Summary and Conclusion,” in which he proposed “to bring the several lines of argument to a focus.” This would have much abridged the labour of forming an opinion of a book on metaphysics, of between 600 and 700 pages.

The volume opens with an inquiry respecting a “datum” for the validity of human knowledge. We receive certain axioms and postulates on the direct variant of consciousness that they are beyond dispute. So of all the truths we call objective, whether intuitively perceived, or by strict logical deduction. But while consciousness vouches for such truths, what (asks our author) shall vouch for the validity of the dicta of consciousness? He asks for a “method of verifying our empirical cognitions,” as necessary to sure results. If psychology is to become more than a mere aggregate of opinions, we must have a datum for testing the conclusions of consciousness. Logic itself rests on the validity of such criterion, and rational psychology must start from this point.

Our author maintains that the confusion and diversity which prevail on all fundamental questions and principles, are ample ground for thinking that there is some such hitherto unestablished datum. The possibility of defending “Idealism, philosophical Scepticism, Fichteism, Hegelianism,” and the like theories, indicates either an error at the basis of such theories, or that reason itself leads to unreasonable conclusions. The protest of the intellect against these incongruous theories, even in those who framed them, is strong proof against them. In support of these remarks of Mr. Spencer, we may refer to the confession of Fichte, who developed in the most rigorous form the purest and most consequent theory of idealism which is to be found in the history of philosophy; and so confident was he of the correctness of his conclusions, that he on one occasion deprecated any future deviation, on his part, from the doctrines he considered himself to have established, by denouncing on himself “eternal condemnation” if he ever did so. Yet, he afterwards acknowledged that even logical proof can only be satisfactory in so far as it is based on natural belief (*Glaube*),* and that he could not believe his own idealism. Of course all such absurd theories as that which Fichte held, during his first period, and which he was always very loth to part

* *Vid.* “Bestimmung des Menschen, 130—148.

with, notwithstanding the above confession, must be founded on assumptions which are altogether untenable; and we have always thought that such an assumption was not far to seek, when we consider that it was necessary to Fichte's system to take for granted that the mind had an unconscious power of framing to itself the universe of ideas, which mankind erroneously suppose to be realities. Our author holds that such theories indicate a "non-recognition of some primordial element in our knowledge, the identification of which is all-essential." This, he argues, is shown by the failure of the efforts to overthrow these systems, for want of a fulcrum in some primary truth. Reid's argument against philosophical scepticism he regards as a protest only, not a dis-proof, as merely assuming what Hume rejects.

We have long thought that some of Sir W. Hamilton's remarks on "consciousness," in his valuable edition of Reid's works, are not very happy. He holds that the only possible answer to the inquiry, "How do the fundamental facts, feelings, beliefs [of consciousness], certify us of their own veracity, is that as elements of our mental constitution, as the essential conditions of our knowledge, they *must* be accepted by us as true." Now this appears to be a sort of metaphysical *hysteron-proteron*; for how are we to know that any feelings, beliefs, etc., are fundamental, are essential conditions of our knowledge, but *because* they "must be accepted?" How, for example, can we know that the belief that *every change must have a cause* is fundamental and essential, but just because we "*must*" accept the proposition—we cannot help it? If we had space, we might adduce passages from Sir William's speculations on this subject, which tend to the notion that we argue ourselves into the admission of the veracity of consciousness; but surely such argument already supposes consciousness as a primary fact. Again, the same acute Scottish metaphysician says, that "unless the melancholy fact [of the mendacity of consciousness] be proved, our faculty of knowledge is not to be supposed an instrument of illusion;" but surely such "proof" would contradict itself, by "proving" that we *can know*! Mr. Spencer has himself criticised a statement of Sir William, similar to the one we have just quoted. "Consciousness is to be presumed trustworthy until proved mendacious. The mendacity of consciousness is proved, if its data, immediately in themselves, or mediately in their necessary consequences, be shown to stand in actual contradiction." Our author acutely remarks, that this mode of reasoning is destitute of force; for "the steps by which consciousness is to be proved mendacious are themselves states of consciousness, and must be assumed as trustworthy in the very act of proving that consciousness is not so." It might have been here added, that Sir William himself has remarked, that

as "doubt itself is only a manifestation of consciousness, we cannot doubt our consciousness." To us it appears evident that consciousness is final, neither admitting nor requiring any criterion. Consciousness must be true—that is, must be a fact, in any particular case of it. Its credibility must be assumed. We quite agree with the author in his views of the inconceivableness of any *test* of consciousness. The effort to apply one is, as he justly remarks, like the "mechanical absurdity of trying to lift the chair one sits on."

Those of our readers who are familiar with the writings of the late lamented Edinburgh Professor—one of the acutest, and certainly the most learned of the metaphysicians of his time—will remember the crucial argument on which he rests the defence of the philosophy of "common sense" against the Pyrrhonic and Humian scepticism, the idealism of Berkeley, and that of the Germans developed and exaggerated from the speculations of Kant. It has been a query with ourselves, believers as we are in realism, whether Sir William gains anything by his extension of the meaning of the term "conscious," when he says—"In the act of sensible perception, I am conscious of two things—of myself as the perceiving *subject*, and of an external reality, in relation to my sense, as the *object* perceived. Each of these is apprehended equally and at once in the same indivisible energy, in the same indivisible moment of intuition." At all events the sceptic might say, "I know what you mean when you say you are conscious of a sensation, conscious of a modification of your *ego*; but how can you be *conscious* of anything else than such a modification—how can you be said to be conscious of a thing which is not in the *ego*, but is external to it? You are conscious of its effect upon you—conscious of your belief in its presence and reality—conscious of the modification of the *ego* which you attribute to its agency on your organs of sense, but how conscious of what is external to your consciousness, and even to your nervous system and sensorial organs?"

The above remark relates merely to a question of strictness in the philosophical use of terms; our author's reclamation is on other grounds. He thinks that in the act of perception, "our consciousness of subject and object is *not* simultaneous." Even were it so, he alleges that *apparent* would be no adequate proof of *real* simultaneity; and for this reason, that states of consciousness which originally occurred in distinct succession, come to follow one another at last so rapidly by constant association as to seem inseparable, so that we unite a whole group of perceptions so instantaneously that they appear as one. He instances our inferring the unseen sides of a book, from the parts we see, and our inference of *solidity* from colour and extension. We

cannot detect any interval between our perception of an object, and of its being distant from us, though the latter is evidently an inference from the former. Now the like may be the case in other instances of apparent simultaneity—from which, therefore, no decisive argument against cosmothetic scepticism, or absolute idealism can be drawn. Mr. Spencer repeats that we are still left to seek a *datum*—a test of the validity of the dicta of consciousness. But he first inquires into the bearing of Descartes' fundamental principle, "Cogito ergo sum," on this portion of his subject.

"Passing over all criticisms on the assumption that the proposition *I think* is more certain than the proposition *I am*—even granting that this last truth can become positively known only as a corollary from the first, there yet remains the fatal question—what gives validity to the therefore? Something more than the two states of consciousness, *I think* and *I am*, is involved; namely, the state of consciousness in which the relation of the one to the other is established. The absolute truth of the premises being admitted, it is clear that before absolute truth can be claimed for the conclusion, it must be proved to be absolutely true that the one involves the other. Surely this needs verification quite as much as the proposition *I am*; nay more, the cognition of the dependence of one thing upon another is more complex, and therefore more uncertain, than the cognition of either thing by itself."

From the above language, it would seem that the author understood Descartes' aphorism as designed to be a logical argument—a modern *enthymeme*—that is, a syllogism with one premiss (here the major) suppressed. So did Gassendi and other contemporaries understand him, as latterly Dr. Reid. Spinoza, in his "Principia," rightly apprehended his meaning, which indeed is evident enough, from the whole scope of Descartes' remarks on the subject; but he makes it decisive in his "Responsio ad Secundas Objectiones," where he says, in so many words, "I think, therefore, I am, or I exist, is not concluded by force of a syllogism, but as a thing self-evident." In fact, Descartes argues that he found he could doubt many other things, even the reality of external nature; but the very act of thought he felt to involve the irresistible conviction of the being of himself the thinker; and he adds, "I found that, in *je pense donc je suis*, there was nothing to induce me to believe it true excepting that I see clearly that, *to think, it is necessary to be.*" He concludes that "all those things which we conceive very clearly and distinctly are true"—an axiom which evidently lies widely open to the illusions of the imagination, to prejudice, and self-will; of which Descartes himself was in some degree aware, for he subjoins: "there is only some difficulty in well-marking what those things are which we conceive distinctly." Leibnitz

was not satisfied with the Cartesian doctrine of "perfectly clear ideas," as ultimate and fundamental elements of belief: he calls for a test of this "clearness;" and he finds it in the "rules of logic," themselves resting on the principle of identity or contradiction.

But to return to Mr. Spencer's inquiry; he asks—"Is it not obvious that the first thing to be investigated is that mental act whereby we recognise the validity of our convictions?" We regard some convictions as less questionable than others, and some as unquestionable. We believe one thing rather than some other thing—why? "considering our whole knowledge to be made up of beliefs, the ground-problem is, to determine the nature of a true belief." He asks for a starting-point not in any one belief, but "in a *canon of belief*," in which lies the fact which underlies all other facts. He proceeds now to what he conceives to be the "desired result"—the "*Universal Postulate*."

"In our search for this 'fundamental fact,'" says our author, "we meet the difficulty that several facts seem equally primordial—personal existence, the existence of ideas, of consciousness, of beliefs. Each seems to presuppose others; and yet each, in turn, seems first. One fact, however, being unavoidably taken for granted in every process of thought, must necessarily have priority of the others; namely, *belief*. Every logical act of the intellect is a predication, which is a belief; all connected thought being made up of beliefs, all the propositions it embodies must be less certain than the existence of beliefs, be they even the existence of consciousness, of ideas, of personality . . . Belief, then, is the fact which, to our intellects, is antecedent to and inclusive of all other facts. It is the form in which every fact must present itself to us, and therefore underlies every fact. It alone of all things cannot be denied without self-contradiction. The propositions—there is no consciousness, there are no ideas, there is no personal identity, may be absurd, but they are not immediately self-destructive. To say, however, there is no belief, is to utter a belief which denies itself; to distinguish between what is, and what is not, and at the same time to say that we do not so distinguish."

We suppose our author here to mean that a particular belief, distributively, may be less certain than the general fact of the *existence of beliefs*. We may be deceived in believing this or that, but it is impossible that in believing any proposition, event, or fact of consciousness, we can deny that there is such belief. So far so good. But we should demur to that part of the statement which maintains that the existence of consciousness and of ideas is "less certain than the existence of beliefs." Shall we say that consciousness is a form of belief, or that belief is a form of consciousness, or that they are both identical? It is worth while here to refer to Mr. Mansel's "*Prolegomena Logica*."*

* *Vide* "Psychological Journal," January, 1854.

He identifies every act of consciousness, in a certain sense, with judgment, there being always a conviction (belief) of the presence of the object of such act, either externally in space or internally in the mind—a conviction amounting virtually to the proposition, "This is here." Thus every operation of thought, even a *single* concept or idea, is a judgment, psychologically considered, though not logically, for a logical judgment requires two terms and the copula. On this principle, psychological judgments (convictions) must always precede logical ones, since we must apprehend (in the logical sense) the terms, before we can in any way compare them. On the same principle, all the spontaneous judgments of the mind are psychological; that is, all our actual intuitions, all the presentations of perception and imagination produce a realization of the presence of their objects without any logical process. Thus the Cartesian *ego sum* is a primitive psychological judgment; for self is so presented in consciousness, that to know what we mean by *ego* is to recognise the all-pervading conviction, sense, impression, belief—call it what we may—of our own existence: so that "*ego sum*" is rather an analytical than a synthetical judgment. To return to Mr. Spencer's statements: if we grant that consciousness is always a certain species of belief or conviction, a *quasi* judgment, not logical or deductive, but intuitive, spontaneous, and psychological (as above); still as consciousness is properly a modification of mind or self, and as from the very nature of the case we cannot but know, be convinced of, or *believe* the fact of this modification in any given instance—it is difficult to see why the beliefs of consciousness should (as Mr. Spencer thinks "is clear") be less certain than the fact of the "existence of beliefs." A man is conscious of suffering severe pain—what can be conceived more certain to him than this?

Our author having adopted the principle that belief is the ultimate fact in psychology, which we can never transcend, next asks—How do we class our beliefs? Why do we regard some of them as more trustworthy than others? and what is the peculiarity of those beliefs which we never question? He is unwilling to take for granted "consciousness, ideas, or personal identity;" and he proposes to assume only "existence, its correlative non-existence, and a cognition of the difference—that is belief; the problem being to find a canon of belief, without assuming anything further." The discussion which follows reminds us of some modern German speculations; but this does not affect their merit one way or the other. "We may, by the union of the two terms existence and non-existence, obtain a third, which describes the nature of some of our beliefs as contrasted with others. Here is the only possible classification;

beliefs of which existence alone can be predicated—that is, beliefs that *invariably exist*; and beliefs of which partly existence and partly non-existence can be predicated; that is, beliefs that *do not invariably exist*. All know that they have beliefs of which no effort can for a moment rid them; whilst they have also beliefs which are changed by evidence, or can be temporarily suppressed by the imagination.” The conclusion is, that the *invariable existence of a belief is our final test of certainty*. We adopt it because we *must*. In saying that it is invariably existent, we say that there is no alternate belief.

A criticism follows, of the views of Dr. Whewell and Mr. Mill, respectively, on *necessary truth*. Our author seems to agree with Mr. Mill in his arguments in disproof of the “alleged *à priori* character of these necessary truths,” and in his theory that “axioms are simply our earliest inductions from experience;” but he rejects Mr. Mill’s criticism of Dr. Whewell’s position, that truths are necessary, the negation of which is “inconceivable,” though he denies with Mr. Mill that these truths, the negation of which is inconceivable, are *à priori*. In another part of the work, however, the author explains that he neither holds the experience hypothesis, nor the antagonist hypothesis of forms of thought, in their respective current acceptation. But for this discussion we have not space; nor for some acute criticisms on Sir W. Hamilton’s objection to the test of inconceivability as the criterion of impossibility; namely, that “of two propositions, one of which must be true, this test proves both impossible. It proves that space cannot have a limit, because limited space is inconceivable, and yet that it must have a limit, because unlimited space is inconceivable; it proves, therefore, that space has a limit and has no limit, which is absurd.” How absurd? asks our author. “Because,” says Sir William, “it is impossible for the same thing to be and not to be.” But how do we know that it is impossible, but because it is inconceivable? Our author adds, that space and time are not strictly conceivable things at all, in the abstract, in the sense that other things are—that the alleged inconceivableness of a minimum or a limit is not an inability to put one conception in the place of another, but an inability to form any conception—and that there is no true parallelism between the cases in which both alternatives are alike inconceivable, and all other cases, in which one alternative is conceivable and the other not. This mode of reasoning is at least worthy of consideration.

The author now rehearses, that the existence of beliefs is the fundamental fact—that beliefs which invariably exist are those which, both rationally and of necessity, we must adopt; and that the *inconceivability of its negation is the test by which we*

ascertain whether a given belief invariably exists or not. When such a belief exists, we have no "alternate belief," which we may know by trying to put some other belief in its place; that is, by trying to conceive the negation of it. When nothing else is conceivable, it is unquestionably true. "Instinctively we recognise the truth above demonstrated, that *its invariable existence is the ultimate authority for any belief.*" This last remark, we suppose, is itself a belief—or rather two beliefs—one being that invariableness is our authority for belief; and the other belief being that we *instinctively* recognise this test of invariableness. The term "intellectual instinct" is not unknown to psychological usage, and it signifies, we suppose, the same as intuition, in the English sense (a wider sense than that of the German *anschauung*). It points to a perception of truth, of which no account can be given. We might be said to believe in our being, and in the facts of consciousness, on this principle, perhaps as correctly as on any other. At all events, is not the use of the term "instinctively," used by Mr. Spencer in reference to our "recognising truth," a virtual giving up of the test, in the innermost adytum of the citadel? Is it not a falling back at once upon a blind impulse, or necessity of our mental constitution? Does it not, at all events, in the last resort, identify this test of "invariability" with an irresistible constitutional tendency to believe some things—we know not why—excepting that we cannot help it. The least inference that we can draw from the above is, that it is very difficult to adhere consistently to *terms*, in the attempt to explore the shadowy region of our ultimate mental principles.

By whatever name we may call this irresistible necessity we feel of believing *some things*—whether it be described as a kind of "instinct," as natural impression, primitive belief, or by any other term, whether it be in any case simply spontaneous and psychological in its form, or in any other case more logical and synthetic; whether, as according to Reid and Kant, such elemental convictions are *à priori*, or, as Mr. Mill insists, with the assent of our author, "axioms are simply our earliest inductions from experience" (to which statement as general we should demur), we fully agree with him that such beliefs must be their own sureties—that an indestructible belief can have no other warrant than its own indestructibility. Mr. Mill has shown, in his "System of Logic,"* that there are remarkable instances in the history of science, in which things were rejected as impossible, because inconceivable, which everybody now knows to be true. The "experimental proof of the indestructibility of a belief, found in the inconceivableness of its negation,"

* pp. 265, 266.

as proposed by Mr. Spencer, requires, therefore, a very careful application. Our author's main reply to Mr. Mill is, that the very facts which he adduces show that "men have mistaken for inconceivable things, some things which were not inconceivable." Examples of beliefs invariably and indestructibly existing are adduced; indeed, such are all the truths of immediate consciousness. They have no other warrant. Such is the truth "I am"—the fact of any particular sensation at a given time. As long as personal existence lasts, the denial that we exist is inconceivable. So, while feeling a sensation of coldness, we cannot possibly conceive that we are actually not feeling it.

The author next states his views respecting what he conceives to be the "real distinction between those universal truths which Dr. Whewell has supposed to stand alone in the inconceivableness of their negations, and those particular truths which we find to have the same guarantee." "How," he asks, "does the belief 'this is sunlight' differ from this—'the whole is greater than its part?'" He replies, "Simply in this—that in the one instance the antecedents of the conviction are present only on special occasions; in the other instance, on all occasions. In either case only one belief is conceivable. In the one case, a single object serves for antecedent; in the other, any object, real or imagined." In the same way, every *axiom* and every demonstration may be shown, either immediately or finally, to be warranted only by the same invariable belief. But we have beliefs which, though strong, do not invariably exist. The belief that the sun will rise to-morrow, is very commonly regarded as a constant one; but we may suppose the prevention of this event possible in many ways. Mr. Spencer says, that while we are imagining these possibilities, "the belief that the sun will appear is non-existent; though speedily reproduced, it is nevertheless temporarily annihilated." To suppose the belief to remain, even while we are conceiving the event to be otherwise, "is an illusion consequent on our habit of using words without fully realizing their meanings, and so mistaking verbal propositions for real ones." "We cannot conceive the event of the sun's rising to-morrow otherwise than it is; that is, conceive of its non-occurrence, without abolishing the representation of its occurrence—abolishing the belief." We speak commonly of a belief as something separate from the conception to which it relates, but the belief is nothing more than the "persistence of the conception." We have a weak belief when we can easily change a state of consciousness which has arisen after given antecedents; we have a strong belief when we can only change such state of consciousness with difficulty; we have a belief of the highest order when we are utterly unable to change it. In each case the belief merely

expresses the persistence of a certain state of consciousness. "The belief being the persistence, the persistence cannot be destroyed, even temporarily, without the belief becoming non-existent for a corresponding period." "If the persistence of the state of consciousness can be broken, the belief is thereby proved to be not invariably existent." It is worth while for the reader, who has the opportunity, to compare this whole discussion on Belief with a chapter on the same subject by Mr. Mill the elder.* There are many coincidences of view, though the scope of the respective writers is not exactly the same. Mr. James Mill's aim is, throughout, to prove the identity of Belief and Association. We will now quote Mr. Spencer's statement respecting the result of the above inquiries, which conduct him to the principle already enunciated, and which he terms the UNIVERSAL POSTULATE:—

"Returning to the purely abstract view of the matter, we see—first, that belief is fundamental, and that the invariable existence of a belief is our highest warrant for it; second, that we can ascertain the invariable existence of a belief only as we ascertain the invariable existence of anything else, by observing whether under any circumstances it is absent from the place in which it occurs; third, that the effort to conceive the negation of a belief, is the looking in the place in which it occurs—namely, after its antecedents—and observing whether there are any occasions on which it is absent, or can be made absent; and, fourth, that when we fail to find such occasions—when we perceive that the negation of the belief is inconceivable, we have all possible warrant for asserting the invariability of its existence; and in asserting this, we express alike our logical justification of it, and the inexorable necessity we are under of holding it. Mean what we may by the word truth, we have no choice but to hold that *a belief which is proved by the inconceivableness of its negation to invariably exist, is true*. We have seen that this is the assumption on which every conclusion whatever *ultimately* rests. We have no other guarantee for the reality of consciousness, of sensations, of personal existence; we have no other guarantee for any axiom; we have no other guarantee for any step in a demonstration. Hence, as being taken for granted in every act of the understanding, it must be regarded as the *Universal Postulate*."

Having thus laid down his Universal Postulate for Truth and Belief, Mr. Spencer comments on Mr. Mill's argument above referred to—namely, that on past occasions this postulate has proved insufficient, and may prove so again. Things once thought inconceivable are now universally and fully believed. The great philosophers referred to by Mr. Mill, who were incredulous of the existence of antipodes, because they could not, in opposition to old associations, conceive of the force of gravity acting "upwards instead of downwards," were dealing, replies

* "Analysis of the Phenomena of the Human Mind," by James Mill, Esq. 1829. Vol. i. chap. 11.

Mr. Spencer, with many states of consciousness, and with the connexions between them. The concepts, earth, man, distance, position, force, and various relations of these to each other, entered into their proposition.

"We must distinguish," he remarks, "between those appeals to the Universal Postulate in which the act of thought is *decomposable*, and those in which it is *undecomposable*. In proportion as the number of concepts which a proposition involves is great, and the mental transitions from concept to concept are numerous, the fallibility of the test will increase, and will do this, *because the formation of the belief is divided into many steps, each of which involves the postulate.*"

The theory here, as further stated by the author, is, that, as we are liable to mental *lapses*, we shall occasionally think we have the warrant of the postulate, when we have it not; and our liability to being thus deceived will vary as the number of times we have claimed its warrant. Our author says that we "instinctively recognise this fact in our ordinary modes of proof"—(again, it is observable, he makes instinctive or spontaneous tendencies the same things as beliefs). An example of the alleged fact is introduced, which does not appear to us a very happy one. "We hold it more certain," says Mr. Spencer, "that 2 and 2 make 4, than that $5 + 6 + 7 + 9 + 8$ make 35;" and he seems to mean what he says. But is this true? Properly understood, we think not. We are reminded, by this example, of Kant's views of similar arithmetical propositions, which he regards, and justly, as equally "synthetical," whether the subject consist of two terms, or any number whatever. Surely, we may at all events assert that nobody who understands addition would admit that two numbers correctly added more *certainly* amount to their sum, than any series of numbers, however long, correctly added, amount to *theirs*. We can easily understand that it is easier to add two numbers together than to add five, and that there is just four times as much risk of error in the operation: and if this is all that is meant, we must admit Mr. Spencer's statement. But nobody, if the condition of the *plus* sign be attended to—in other words, if the addition be actually (*i.e.* correctly) made—would hold it more certain that 4 was the result of one addition, than that 35 was the result of the other. In taking his crucial example from the exact sciences, in which every succeeding step in the demonstration is equally certain, if that step be really taken, Mr. Spencer, as appears to us, has hardly done justice to his theory of the Postulate. The case of the "antipodes" is widely different. We might as well say that, on the supposition that a man shall actually walk from the beginning to the end of a given straightline, it is more certain that he will reach any other given point in it

than the extremity! Our author, however, draws to a conclusion his preceding remarks, as follows:—

“Not only as judged instinctively, but as judged by a fundamental logic, that must be the most certain conclusion, which involves the postulate the fewest times. We find that, under any circumstances, this must hold good. Here, therefore, we have a method of ascertaining the respective values of all cognitions.”

This last remark seems to call for some comment. What distinction does the author intend to draw between “instinctive judgment” and “fundamental logic?” We suppose “instinctive judgment” to mean the same thing as “invariable, indestructible belief.” On what then, different from this, do the fundamental laws of logic rest? Are not these laws invariable, indestructible beliefs? What else are the axioms, that “if two terms agree with one and the same third, they agree with each other;” and “if one term agrees and another disagrees with one and the same third, these two disagree with each other?” If it be said that “instinctive judgment,” or common sense, perhaps, leads to any conviction, how else do the laws of logic lead to it? And with regard to the touchstone itself, of the “respective values of all cognitions”—namely, the fewness of the times the Postulate is involved—it would, if we understand Mr. Spencer's views aright, be fatal to the certainty of the exact sciences, in which conclusions are often reached by a considerable chain of propositions, all following rigorously from each other.

Mr. Spencer proposes, in his third chapter, to exhibit the “chief corollaries” involved in his Universal Postulate, by putting to this test some of the principal metaphysical theories which have prevailed. We have some criticisms on Berkeley:—

“Self-consciousness cannot be immediate knowledge,” says our author. “We can only be conscious of what we were a moment ago. Nothing can be immediate knowledge into which self-consciousness enters as one concept. Therefore, the knowledge of having sensations cannot be immediate knowledge. Were the consciousness of sensations the same thing as the consciousness of receiving sensations, Berkeley's first step would be unassailable:”

that is, the principle that what we call external objects are our own sensations, of which we have immediate knowledge, and in feeling which we cannot be mistaken, would be unassailable. Our author thinks that Berkeley “confounds the *having a sensation* with the *knowledge* of having it.” We do not see that this distinction, or the author's remarks, above quoted, on self-consciousness—granting their validity—can affect the case either way. The dispute was about the *cause* of our sensations. Berkeley never doubted that they had a cause without us: he only referred them immediately to the causation of

the First Cause—an "Eternal Spirit," denying the existence and even possibility of any secondary or intermediate causation, such as we assign to what we call matter, by a natural unvarying instinct, a constant impression or belief existing from infancy to death—a conviction inseparable, even by reasoning, from our animal life—maintained in action every moment by the perpetual sense we have of resistance—a resistance which often overcomes our most strenuous acts of will, and consequent muscular exertion.

We have some acute and elaborate criticisms in connexion with Hume's Scepticism:—

"Which is the more certain," asks our author, "the existence of objects, or the existence of impressions and ideas? How is this question to be decided? The reply is: The relative validity of our beliefs in subjective and objective things is tested by the number of times the Universal Postulate is assumed in arriving at each belief respectively."

We have already intimated the difficulty of abiding by this general principle, and we cannot here pursue this point. Mr. Spencer, however, ingeniously illustrates his doctrine by the example of our looking at an object—a "book," for instance. We do not think about any sensation, we attend only to the book. We know nothing of any image of it;—we are "conscious of the book," not of an impression of the book—of an objective thing, and not of a subjective thing. The sole content of our consciousness is the book, considered as an external reality. We feel that our recognition of the book is an indecomposable act. We cannot, while contemplating the book, believe that it is non-existent: while we continue looking, the belief in the existence of the book possesses the highest validity possible. "It has the direct guarantee of the Universal Postulate, and it assumes this Postulate only once." No doubt, the main impression is here the psychological, not logical one—equivalent to the "book is here," as Mr. Mansel would express it.*

Certainly, our own being does not seem here to be consciously postulated; and this is the reason why we think a distinction, not always made, should be observed between general consciousness and self or reflected consciousness. Mr. Spencer here objects to Sir W. Hamilton's view, that in perception we are conscious of subject and object "in the same indivisible moment of intuition"—not that he objects to extending the term consciousness to what is not actually within our own minds, but because in many cases our minds are so absorbed in the object that there is no accompanying consciousness, at the time, of subjective

* "Prolegomena Logica."

existence. He appeals, not without reason, to ordinary language in support of this (as we think) undeniable fact:—We are “absorbed” in thought, “lost” in wonder; a man has “forgotten” himself. Men sometimes lose their lives by their attention being wholly occupied by something else when danger is present. Again, the infant’s earliest perceptions are unaccompanied by any notions of self. Our author concludes that the cognition of an object as an external reality is an undecomposable mental act, involving the Universal Postulate once only, and therefore it has the highest certainty.

Hypothetical Realism, or Cosmothetic Idealism—(*i. e.*, the doctrine that the external world is not directly cognized in consciousness, but by some form of representationism)—is next tested by the postulate. A man looks at a fire. If it be said, he can only know his own impression of the fire, what follows? “He postulates the fire; he postulates himself; and he postulates the relation between these. Instead of an immediate undecomposable cognition of the fire, the alleged representative cognition seems decomposable at once into three things, and cannot be conceived without them. In the one case,* he cannot use the Postulate more than once; in the other, he cannot avoid using it three times.” The conclusion is, that we have, thus, a proof that Natural Realism is more certain than any form of Representationism. But, independently altogether of the claims of the various theories of external perception, we fear that this test of the Postulate would sometimes prove what is contrary to consciousness. For there are cases, surely, in which our attention is especially directed to the relation which there is between the *ego* and the *non-ego*. We may, for instance, speculate or experiment on the properties of matter with immediate *reference* to the sensations it produces in us. Shall we, then, say that because three things are implied—namely, the object, the *ego*, and a relation between them—we are not as certain of the relation as we are of the object? Suppose the man to try how near he can go to the fire without changing the agreeable warmth he feels, into the pain of incipient scorching—is he not as certain of the relation between his sentient self and the fire, as he can be of the fire’s existence in any theory of perception? Surely he is, and justly. Yet the belief in this relation—which is so firm, involves the two other elements. Our author, in further applying his test to Absolute Idealism, distinctly holds that if a proposition or theory be based on three beliefs, each confessedly “indisputable,” it would be less certain than though it stood on one such belief. This we cannot agree to. It would prove that

* The case of “Natural Realism,” “Presentationism,” or “Intuitionism.” See Sir W. Hamilton’s “Reid,” p. 816, *seq.*

the axioms of Euclid were more really certain than the results of the demonstrations which assume them ; but who would venture to say this ?

The author subjects the Kantian hypothesis with regard to the entire subjectivity of space and time to the Postulate, and shows that it is opposed to our invariable natural belief, and is wholly inconceivable in connexion with the real existence of things (*Ding an sich*), which Kant inconsistently admitted. Many of the speculations of Fichte, Schelling, and Hegel are obviously incapable of maintaining their ground against the same test. They are at variance with invariable, indestructible belief.

We regret that we cannot proceed with the remainder of this elaborate work. We have ventured to differ from the author respecting the *application* of his fundamental principle—the Universal Postulate ; but we should do him injustice if we did not state that our analysis of this principle necessarily fails to convey to the reader an adequate idea of the work as a whole. The bulk of the volume consists of discussions, which rarely contain any explicit reference to the Postulate ; after the explanation of which, follows a profound treatise on Compound Quantitative Reasoning, as illustrated by the laws of mechanics, the doctrine of ratios, and by geometrical and algebraical analysis. Another Dissertation follows on Qualitative Reasoning, perfect and imperfect ; that is, reasoning into which the idea of co-extension does not enter as a necessary element, and by which co-existence and non-coexistence are determined. Next is a chapter on Reasoning in General, in which Mr. Spencer denies that the Aristotelian dictum *de omni et nullo*, or Mr. John Mill's axiom that "whatever possesses any mark possesses that which it is a mark of," or any other axiom that can possibly be framed, can express the ratiocinative or inferential act, which, he says, is a "single and almost unconscious intuition ;—a description of it to which we do not assent ;" for if so, we do not see how we could be said to "infer" at all, any more than we *infer* that we have a sensation of pain when we can at once reduce our sense of it to a single intuition.

Dissertations follow on Perception, the Relations of Things, and Consciousness ; and these are succeeded by a most elaborate analytical inquiry into the physiological and psychical Connexion of Mind and Life ; all which are well worthy of the student's attention ; though he may find in some of them a greater dependence of mind on bodily organization than he would expect, especially considering that phrenology as a system is here rejected. The work closes with a chapter on Intelligence, Reflex Action, Instinct, Memory, Reason, the Feelings

(emotions), and the Will. The whole volume, to the student who has been accustomed to Reid and Stewart, and to the Eclectic and Kantian doctrine of *à priori* and synthetic truth, will probably appear of a too experimental and "sensational" cast. Our author thinks that all mental phenomena are only "incidents of the correspondence between the organism and its environment;" and he maintains that there is "really no line of demarcation between reason and passion." He holds with Mr. Mill, that axioms, or so-called necessary truths, are simply our earliest inductions from experience. On the Will and its Freedom, our author's opinions will appear specially objectionable. He regards the current opinions on these subjects as illusory; and many will think that his theory tends to a species of fatalism.

"All actions," he remarks, "must be determined by those psychical connexions which experience has generated, either in the life of the individual, or in that general antecedent life whose accumulated results are organized in his constitution. . . . The changes which he is said to will are wholly determined by the infinitude of previous experiences, so far at least as they are not produced by immediate impressions on the senses. . . . A body in space, subject to the attraction of a single other body, will move in a direction that can be accurately predicted. If it is surrounded by bodies of all sizes, in all directions, at all distances, its motion will be apparently independent of the influence of any of them; it will move in some indefinable varying line that appears to be self-determined; it will seem to be free. And, in the same way, just in proportion as the cohesions of each psychical state to others becomes greater in number and various in degree, the psychical changes will become incalculable, and apparently subject to no law. . . . If psychical changes do conform to law, there cannot be any such thing as free-will."

This denial of free-will is contrary, we think, to the "Universal Postulate;" for surely we are irresistibly and invariably conscious that we are free. But we must forbear further comment, and we only add that, though we have met with many things in the work from which we have been obliged to withhold our assent, we can nevertheless commend it to the reader's attention as a work of high talent, deep research, and great analytical power. It is an important contribution to speculative philosophy, and well deserves a diligent and careful study.

ART. IX.—STATE OF LUNACY IN ENGLAND.

THE Annual Reports published by the authority of the Committee of Management of the various county asylums in England generally contain a valuable body of evidence relative to the condition of the pauper portion of the insane population of this country. The value of these Reports would be considerably enhanced if the resident medical officers had the space and leisure to enter more minutely into detail respecting the numerous cases of interest which must daily come under their observation and treatment. We are fully aware of the onerous and anxious duties imposed upon the medical superintendents of our large county asylums, and of the little time they have to devote to literary work. We wish it were otherwise. The evil complained of can only be obviated by the appointment of persons to relieve the medical officer of the anxious mechanical work which, according to present arrangements, occupies so much of his valuable professional avocations.

It appears from the last Report of the medical superintendent of Bedford Lunatic Asylum that a larger number of patients by 14 were received into the asylum than in the preceding year, those admitted during the year 1855 being 40 males and 57 females, and throughout the year just closed 54 males and 57 females. Of these 70 were cases of mania, 16 melancholia, 17 imbecility, 2 dementia, and 5 idiots; amongst whom the combinations of physical disease are so numerous, and many of so incurable a nature, as to reduce the prospect of recovery to a very small amount.

The discharges numbered 54, the average of recoveries being nearly equal to the increase of admissions; 8 only were discharged relieved, 3 removed by friends, and 1 transferred to another asylum.

The mortality, although very large, has been a fraction under the average (upon the whole numbers) of last year. As many as 12 have died within three months of their being brought here, 5 of whom did not survive a fortnight. One male, an epileptic, 79 years of age, and having been bed-ridden for years from contracted limbs, and nearly exhausted from the journey, died on the twelfth day. A female, aged 68, with disease of the heart, died on the fourth day from exhaustion, having been some time without rest, and refused her food previous to admission. A female in the last stage of pulmonary consumption lived but seventeen days; and one very distressing case of a female in the prime of life, whose youthful days had been spent in debauchery, but who, for eleven years, had been an industrious and faithful

wife, was brought to the asylum, worn out from constant excitement, having a large wound on the leg, with ulcerations from ligatures on the wrists and ankles, sunk on the fourteenth day. The two last-mentioned patients were reported to have refused food for nearly a week, but took every kind of nourishment offered to them from the moment they were in the asylum.

Mr. Denne reports that no suicide has occurred in the asylum during the last year, notwithstanding 36 suicidal cases were admitted into the asylum. Mr. Denne and the Commissioners of Lunacy report favourably of the condition of the asylum.

The last Report of the Buckinghamshire Lunatic Asylum contains a vindication of the Committee, whose conduct has been so seriously impugned for their summary dismissal of Mr. Millar from the medical superintendence of the asylum.

We consider that Mr. Millar has published a satisfactory refutation of these charges, to which we refer our readers interested in this matter.*

It appears from the Report of the North Wales Lunatic Asylum for 1857 that—

“The inmates of the asylum under our care have been blessed with excellent health and total freedom from epidemic disease during the past year :—

The admissions have been	68
The discharges :—viz., cured, 32 ; relieved, } 15 ; not relieved, 11	58
The deaths	16

“The causes of death have been such as are common to the insane :—viz., consumption, general paralysis, debility, and exhaustion ;—complaints over which medical science has little control.”

The medical superintendents, Dr. R. L. Williams and Mr. George T. Jones, when referring to the mode of conveying patients to the asylum, justly observes :—

“There is nothing that a lunatic will longer recollect and more indignantly resent than being deceived. It is much better to tell a patient, calmly and candidly, that it is deemed essential to his own welfare and that of his family, that he should be sent from home for a time, and that he will be kindly treated by those who have the care of him at his temporary abode. Even the employment of gentle force, though seldom required, is preferable to deceit—the one will be forgotten and forgiven, and the other never. When the patient has been brought to the asylum by stratagem, we are always looked upon with suspicion and as participating in the fraud practised upon him ;—confidence in us is lost, and our influence lessened.”

When alluding to the necessity for the establishment of a

* A Refutation of the Fourth Annual Report of the Visitors of the Bucks County Lunatic Asylum. London : Renshaw.

middle-class asylum, a scheme we have often advocated in this Journal, the subjoined pertinent remarks are made :—

“The law has wisely provided for the pauper when visited by affliction in its worst form—insanity : but alas ! for the decayed tradesman, the struggling medical practitioner, weighed down by anxiety, disease, and misfortune, the deserving and ill-requited curate, and the poor ill-paid and overworked governess—one of the most frequent victims of insanity ! Probably nurtured in the lap of luxury and indulgence, misfortune or imprudence on the part of her parents reduce her to seek employment little congenial to her former habits—overworked mentally, finding little sympathy from her employers, with little or no society, and slighted even by menials, her health gives way, her mind succumbs, and insanity ensues. Often have we seen such sensitive young creatures consigned to herd with paupers in our public asylums. In our own we could unfold tales of distress and misery amongst this class, which would harrow the feelings of the reader ; but delicacy forbids our entering upon details beyond a brief allusion to one or two cases, which cannot meet the eyes of themselves or their friends. In one case, a very interesting young creature, a foreigner, became violently maniacal from excessive mental labour. What would have become of the poor young lady, we cannot conjecture, had she not attracted the attention of a reverend gentleman*—an active and energetic member of our committee, and whose indefatigable zeal in all that concerns the welfare of this institution we beg thus publicly to acknowledge. This gentleman had the poor sufferer conveyed to this asylum, where she soon recovered ; and she was subsequently admitted into an excellent institution in London, till she could be restored to her friends in France.

“The fate of the other sufferer was not so fortunate. She was the daughter of a once prosperous and wealthy gentleman, who fell into commercial difficulties. He died, and his family were left destitute, and his daughters were obliged to resort to teaching as a means of subsistence. Our patient soon became unequal to the labours and anxieties of a life to which her former habits were quite inadequate, and insanity was the consequence. After long and futile attempts by her friends to treat her at home, she was brought to this asylum, and admitted at the expense of her struggling relatives as a second-class patient. She had advanced considerably towards recovery, when the pecuniary difficulties of her poor friends obliged them to remove her to their own home, where she soon relapsed, and became as bad as ever ; and she is now an inmate of a pauper asylum, where she will probably end her days !”

It appears from the last Report of the Essex Lunatic Asylum that—

“On the 25th December, 1855, there were 334 patients in the Asylum, namely—139 males and 195 females.

“The number of patients admitted during the year was 134, viz.—

* Rev. W. H. Owen, Senior Vicar of St. Asaph.

70 males and 64 females; and the total number of cases under treatment in the course of the year was 468; of which number only about 80 were curable—notwithstanding the number of old and incurable cases 52 were discharged recovered; 5 were removed improved, 1 unimproved, 2 escaped, and 38 died; there now remain in the House 156 males and 214 females—total 370.

“A considerable increase has taken place in the number of patients; the lowest number was 334 and the highest number 373; while the daily average number in 1855 was only 321.”

It will—

“Be perceived that the number of recoveries bears a very respectable proportion to the number of curable cases under treatment.”

The following extract from Dr. Campbell’s valuable Report contains matter of great interest:—

“Twenty-five patients were admitted in whom a suicidal propensity formed a feature of derangement, and many of them, after admission, manifested the intention of destroying themselves; but the customary superintendence exercised over such persons has fortunately prevented any suicide. In mentioning this, I only do so to bear testimony to the fact, that every practicable care was employed to avert so distressing an event, for, notwithstanding the greatest vigilance and best management, but for the kindness of Providence, such accidents will sometimes occur. My own conviction is that to the determined suicide opportunity is seldom wanting.

“Of the various means whereby suicide is attempted by the insane, that of starvation is often persevered in with the greatest obstinacy, and in several cases, after every effort to conquer the opposition of the patient had been used without success, I was obliged to have recourse to compulsory feeding.

“To distinguish when the refusal of food arises merely from hallucination and when it is the consequence of organic lesion, requires no small degree of attention. One patient who formed the most determined resolution to destroy herself by starvation, was reduced almost to the appearance of a skeleton, and extremely enfeebled. From the healthy state of the tongue and absence of any bodily disease, there was no reason to apprehend a loss of digestive power. Nutritious fluids, with the addition of wine, were introduced twice a day into the stomach by means of a feeding instrument, and cod-liver oil was administered in the same way. She persisted in her lamentable purpose for nearly four months, when becoming convinced that she would not succeed, her resolution relaxed, and she began to take food voluntarily. From that time she rapidly improved in her bodily health, and I hope may yet be discharged well.

“In several other cases also had the means mentioned not been resorted to, the patients must have sunk and died from inanition.

“I regret to say that in some instances this treatment was imagined by patients to be the very excess of cruelty, and stated to relatives as such when they visited the institution. In the great majority of cases however, the feeling was very different. Many patients have expressed

much gratitude for the humane treatment they have received, and I have during the past year been much gratified by frequent visits from patients after their discharge, and, also, by receiving several letters evincing good feeling, and gratitude for the attention they received. The following letter from a pauper patient is worthy of being noticed:—

“ ‘Notting Hill, London, January.

“ ‘Honoured Sir,—The remembrance of past mercies often comes very forcibly to my mind. When I think of all that has been done for me, I feel I am a great debtor, and now that God has prospered me so much, not one thing has failed me in all I have undertaken, but hitherto has He helped me. I think I may venture to ask this humble request, that the enclosed 5*l.* may be received as a donation to the Asylum, feeling deeply sensible I owe all my present comforts to that unerring Hand that placed me there, and to you and others that are connected with the Asylum, by being made instrumental in doing so much for me. I earnestly trust you will take it as the only little return I can make, with kind duty

“ ‘I am, honoured Sir, your grateful servant,

“ ‘Dr. Campbell.”

“ ‘E. C.’

“Respecting the causes of insanity in the patients admitted, it will be observed by the tables that hereditary predisposition forms no small number, and I regret to have occasion again to repeat that a considerable number became affected with their malady in consequence of the abuse of spirituous liquors. Some of these have been discharged recovered; and although I do not place implicit confidence in their veracity, yet I have reason to believe that the account which they give of the origin of their deplorable habit is not far from the truth. Some allege that they became addicted to the use of intoxicating liquors for the purpose of relieving bodily pain, or the depression of mind occasioned by poverty and want—some to the pernicious habit of having been indulged in early years. Some ascribe their evil propensity to bad example; and not a few females to the use of cordials administered to them remedially; and especially during in-lying, by kind but injudicious friends. The habit of drunkenness in whatsoever way it may have been induced, is too often incorrigible; and among its baneful consequences we meet with many instances not only of temporary insanity, but of permanent lunacy and imbecility of mind.

“The discipline of a Lunatic Asylum, and the dread of being again confined, have I believe in some instances induced the drunkard to observe temperance. But it is easier to prevent than to cure, and in not a few of the cases which have come under my observation, I have no doubt that the propensity to drunkenness might have been prevented. To children and to ailing or enervated adults, the use of so dangerous a foe to the health, both of the body and of the mind, as ardent spirits is allowable only when confined to immediate medical prescription; and great care should be taken to guard against the insidious approach of the enemy in disguise, whether in the inviting form of some luscious liqueur, or under the friendly aspect of stomachic tincture or cordial balm.

"The treatment of the patients has been varied according to the features and the causes of their lunacy.

"The moral management by the usual means of correcting their evil habits and propensities, and of regulating as much as possible their conduct and behaviour, has been of much utility. Internal remedies with good nourishing diet and, frequently, stimulants, by restoring the general health, have been of great service.

"The warm bath sometimes conjoined with the affusion of cold water on the head of the patient, has been used with advantage. Exercise and employment in the open air have been of general utility, and in some cases of maniacal excitement very great benefit has been derived from the use of the cold shower bath. Mechanical restraint has not been employed in any case during the year, but it has been found necessary in several cases of high excitement to have recourse to seclusion, and a reasonable degree of coercion, which cannot be altogether dispensed with in Institutions of this nature, though conducted on principles of the greatest humanity and tenderness to the patients.

"I have in former reports noticed the importance of religious services in the moral treatment of the patients, and further experience makes me feel if possible more confirmed in my opinion, of the propriety of affording patients in an Asylum the benefit of public worship.

"I have repeatedly during the past year had occasion to notice the fixed attention during service, of many patients, who, on other occasions, were particularly remarkable for wandering of thought, and unsteadiness of purpose. This circumstance is of itself a strong recommendation of the practice, evincing its tendency to favour the recovery of that control of the mental faculties, in which soundness of mind may be regarded, in a great measure, to consist. The benevolent Author of the Gospel restricts the communication of his doctrines to no particular grade of understanding. He who has but one talent, is no less favoured than he who has three.

"In regard to the amusements of the patients, I can recall nothing of any moment to which in former reports I have not alluded. The amusements of the insane poor are derived very much from their daily occupation, still a considerable number of them evince a taste for reading; consequently it is of much importance that the means should be supplied for the enjoyment of this source of relaxation, when their inclinations prompt them to seek it. Influenced by these considerations, as well as by the desire of affording the patients every comfort, a considerable number of publications in weekly and monthly parts were provided during the year, and I gladly take this opportunity of acknowledging the receipt of some very appropriate presents of books, from a lady in the neighbourhood, for the use of the patients; an example I should be glad to see generally followed. The game of cricket was introduced, and continued in high favour, a large number of the patients with some of the officers and attendants joining in it during the summer evenings. Living in a state of seclusion from the world, and shut out from the innumerable incentives to mental activity, novelty forms a prominent feature of every attempt made to sustain their mental and physical energies. Every addition consequently

made to the means of affording them proper gratification, serves to extend the means of moral treatment, and innocent amusements often no less beneficially than useful employment serve to displace bewildering hallucinations. I should be glad if extended facilities were afforded for musical parties during the winter months.

"Many of the patients, and especially those in whom the malady was not in a chronic or confirmed state, derived great benefit from bodily labour. A large number have been almost daily employed at various kinds of out-door work; one has been employed regularly in the carpenter's shop, two or three in the tailor's shop, and five in the shoemaker's shop, three have been employed painting and white-washing, thus assisting to forward some necessary repairs. The females were principally employed in the washing-house, work-room, laundry or linen-room, kitchen, and in assisting the attendants, especially in the operation of cleaning. On reference to table No. 13, it will be seen that a large quantity of work has been done; in addition to which several little articles were made for my family and the other officers, affording pleasure to the patients, and in some cases attended with very beneficial results. It is often no easy task to induce patients to submit to any kind of labour. Not a few of them obstinately refuse to work, because any such employment would be degrading to persons of their imaginary high rank and unbounded wealth. Others again declare, that they will not work unless they receive regular wages for their labour. Others think they are unjustly confined, and that if their work is found profitable they will be longer detained in the Asylum. But by persuasion, example, and little indulgences, their obstinacy is at length generally subdued.

"Some patients whose cases appeared to be almost hopeless, recovered to a considerable extent by working on the farm. In one remarkable instance of recovery in which the most fanciful and gloomy anticipations predominated whenever the patient was warmed by toil, his mind was relieved. It seemed as if the vapours of the brain exhaled with the sweat of the brow. The beneficial effect of labour is on the mind two-fold: it serves not only to dissipate gloomy and incoherent thought by day, but also to prevent the distressing restlessness of the night, by preparing the patient for sound repose.

"During the year I have to encounter no small degree of trouble by the often-expressed wishes of parties to remove their insane relations, under the impression, that if they can work here, they are able to work at home. Several patients are now in the Asylum whom it might not be easy at all times to prove to be insane, and yet whose minds have long been incurably unsound, and who if liberated would be extremely troublesome to their friends, and to society. I would strongly impress upon such persons how difficult it is in many cases of real lunacy to form an opinion, or even to decide whether the patient be actually insane or not. Persons who are unacquainted with the great variety in the forms and degrees of lunacy, are apt to suppose, that to detect any aberration from soundness of mind does not require much experience, and it is not uncommon for parties to visit for the purpose of judging of the state of the malady, while in some cases no rational

opinion can be formed, even by those who understand the subject, without a particular and careful retrospect of past symptoms."

The "Bethlem Hospital Report" for 1857 is replete with valuable matter. The statistics of the asylum are as follows:—

"During the past year 61 male and 110 female patients, making a total of 171, have been admitted into the curable establishment; and during the same period, in that department, 111 patients have been discharged *cured*, 78 discharged *uncured*, and 6 have *died*. Three deaths have occurred this year among the incurable female patients, after a residence respectively of 17, 31, and 33 years; also that 41 criminal lunatics have been admitted, and that 3 have died in that class, one of whom had been in the Hospital 26 years, and another 33 years. One male patient is, at the present time, absent 'on leave,' making 302 in the Hospital on the 31st of December, 1856. These for brevity may be arranged in the following Table:—

	Males.	Females.	Total.
Curable	47	80	127
Incurable	38	36	74
Criminal	81	20	101
	<hr/> 166	<hr/> 136	<hr/> 302

We cite the following interesting case of melancholia and delusions depending upon physical disease:—

"A. S. was admitted into Bethlehem Hospital July 7, 1856. Her previous occupation had been that of a domestic servant. She was unmarried, but the mother of two children, the youngest being two years old. The medical gentleman who had previously attended upon her, and certified to her insanity, reported, 'a strong tendency to commit suicide; a continual desire to have her inside opened; a belief that she had no bowels; and that her character and temper had lately undergone a great change, evincing hatred to those she had formerly loved and esteemed.' She was certified also 'to be dangerous to others.' On admission her physical health was feeble, pulse weak, appetite capricious, bowels constipated; mentally she appeared suffering from continued melancholia, with obstinate taciturnity. She acknowledged her despondency and attributed it to her physical state, aggravated by the neglect of the father of her children. If conversation could be forced from her it referred mainly to the state of her inside, which she considered had been misplaced, that her entrails had left her, and that she must be cut open. On these subjects she was unyielding, and became angry if any attempt was made to reason with her. The frequent constipation of her bowels, to a great extent, supported her impression that she had no inside. A report that she was suffering from a hernia induced personal examination, when a large tumour was discovered. She afterwards acknowledged her belief that into this sac her intestines had slipped. For the first fortnight after her admission the ordinary moral treatment of the Hospital was employed: a generous diet, wine, laxatives, and morphia, in grain doses at bed-time, to

procure sleep. During this time no improvement in her mental symptoms was manifest. Her despondency remained unrelieved, and the delusions unchanged. Mr. Lawrence was then requested to see her; and after a careful examination of the tumour, and a full persuasion that no hernial sac existed, proposed to remove the tumour, hoping, by this measure, to cancel the delusions that appeared to depend so much upon its existence. The patient offered no objection to the operation, and on the 24th inst., her bowels having been prepared by aperient medicines, followed by an injection, Mr. Lawrence removed the tumour, which was of cellular structure, and weighed (after a large quantity of fluid had escaped) one pound and three ounces. The operation was performed by Charrière's éraseur, an instrument fully described by Mr. Spencer Wells in the 'Medical Times and Gazette' of October 11th. It had a peculiar advantage in this case, in diminishing materially the bleeding consequent upon the operation. The patient pleaded so earnestly for chloroform that it was administered, but it did not succeed in obtaining the desired insensibility. She, however, submitted to the operation with tolerable fortitude; but little blood was lost, and in a few hours she had some calm and refreshing sleep. The operation lasted about half-an-hour; the pain increased apparently with each click of the screw, by which additional pressure was produced around the point of constriction. For two or three days there was slight constitutional disturbance, a little feverishness; these symptoms soon gave way to general improvement, though mentally she retained many of her delusions, and grumbled sadly at the pain that had been given her. On the 9th of August (sixteen days after the operation) she was reported to be 'going on well, as regarded the operation, and her mental symptoms improved.' Her appetite now increased, occasionally aperient medicine was necessary; her spirits were good; and her conversation, now cheerful and unrestricted, referred only so far to her late illness as to complain of smarting annoyance from the granulating surface of the wound. To the 17th of October her mental and physical improvement continued: she became robust, happy, and industrious. Beyond aperients, the only medical treatment required was occasional sedative draughts at bed-time, and twice in the week nitrate of silver was applied to the granulations, which were a little too exuberant. On the 21st of October she returned to her family quite well.

"The points in this case which, perhaps, merit the most attention are, 'The power that the physical condition exercised over the mental state in causing the melancholia and delusions; the desirability of removing the cause before treating the effect;' and thirdly, 'The character of the instrument used by Mr. Lawrence.' As regards the latter point it may be worth while to state, that much annoyance to the patient, and difficulty to the operator, in obtaining free access to the part, was obviated by the mechanical arrangement of the instrument; that little more than an ounce of blood was lost during the operation; and that, after the removal of the tumour, although a surface of three square inches was exposed, no vessel was tied—a feature in an operation

of considerable importance when the patient has shown great suicidal determination."

It appears that of—

"The 111 patients discharged *cured*, 83, or an average of 75 per cent., had not been insane more than three months at the time of their admission; whilst of the 78 discharged *uncured*, only 35 had been insane so short a time as three months, and a large majority of the remaining 43 had been insane six months and upwards."

In speaking of the criminal lunatics, Dr. Hood observes:—

"The females of this class are few in number (20) and, not differing much from each other in habits and general character, can be permitted to associate together without inconvenience. Their wards are well lighted, ventilated, and warmed. Their single airing court is as much as is required; and sufficient healthful occupation is provided for them in the care of their own wards, and in ironing, mangling, and needle-work.

"The case is very different with the males, who consist of three distinct classes, viz.:—

"1st. Men of education and refinement who, under the deep affliction of insanity, have committed the acts which have placed them in their present position.

"2nd. Men of little education, and humble position in society, who being similarly afflicted have similarly acted, but who, in general, are harmless, inoffensive, and controllable.

"3rd. Men of characters the most debased, whose associates have ever been of the worst description, and whose lengthened career of crime has been suspended by incarceration in a prison, from which they are brought to the hospital on account of insanity, which, in many instances, was only feigned.

"The first two of these classes can be united in society without inconvenience, but they regard with horror any admixture with them of the third; yet it is not right to allow that large amount of blasphemous and indecent language which is certain to result from permitting the third class to associate exclusively together—nor is such a proceeding safe. It is well known that the *insane* rarely act in combination for a common purpose; but this class consisting of individuals, many of whom are not insane, are capable of any conspiracy, and, it is believed, would gladly sacrifice the life, as they often threaten to do, of any officer or attendant if a favourable opportunity were offered them, to give a colour to that pretended insanity which they have but too successfully assumed. It is needless to remark on the amount of vigilance that is requisite in the care, and the anxiety that must accompany the superintendence, of such men, removed from the rigid discipline of a hulk or convict prison, to which has, in many cases, been added the security of solitary confinement, to associate with other convicts unshackled and unrestrained in the wards of a lunatic asylum.

"The first of these classes is little inclined to manual labour; these patients prefer intellectual pursuits, with the means for which they can be and are abundantly provided. Their exercise is, unfortunately,

with the other classes in the single airing-ground appropriated to the whole.

"The second class is extensively employed in manual labour to their own gratification, and to the benefit, not only of themselves, but all the Hospital.

"To the third class as much occupation is afforded as circumstances will admit, but, in general, they are not to be trusted.

"The wards for these patients present an unsatisfactory contrast with the rest of the establishment (and produce an unfavourable impression on all visitors). Yet it is not, perhaps, judicious under present circumstances to recommend much alteration in them. They are obviously unsuitable for the three classes now occupying them. In proof of this it is only necessary to advert again to the fact that there is only one airing-court for all."

The statistical records of the Hanwell Asylum for 1857 are as follows:—

"The total number of patients, of all descriptions, received into the asylum in the past year, was 80 males and 60 females, including therein 6 cases of re-admission. There have been discharged cured, 25 males and 22 females; 37 males and 35 females have died, as has been already stated; 13 males and 4 females have been removed to other asylums, or discharged into the hands of their friends; and there remained in the asylum at the close of the year, 439 males and 584 females."

Dr. Begley's report occupies about three pages. Mr. Sankey, the medical superintendent of the female department, gives us some interesting details connected with his department. The two cases of accidental injury to patients, mentioned by Dr. Begley, are of interest, and should be read. In speaking of treatment, Mr. Sankey remarks:—

"The first and chief aim is to obtain for the patient rest for the affected organ—mental inactivity or mental rest. This is the object of what is called the moral treatment; a rest of mind is not to be obtained by indolence, which is probably more irritating than soothing, but by light amusements, by diversion. The means of amusement have been accorded freely during the past year: the chief of which have been walks in the neighbouring country, a summer entertainment in the open field, a weekly dance during the winter months. Some of the patients have been supplied with hoops and skipping ropes; two patients were taken to the Crystal Palace, and a small party spent a day at Hampton Court. The effect of these means is greater than one could have imagined. One patient discharged during the past year, told me, sometime after her recovery, that the first thing she could remember on the return to her reason, was crossing the Thames in a boat on going on one of these excursions to Kew. This patient was suicidal, and obstinately refused food; it was on this excursion that this propensity left her and did not again return."

The chaplain's report contains matter worthy of the most

careful consideration. His position is one of delicacy and difficulty, requiring much judgment to guide him in the proper performance of his sacred and solemn duties. He says:—

“In those cases in which there is really or even only apparently a *religious element*, I believe the following points to be generally observable: first, that a total disregard of the obligations of religion is, in insanity, often followed by *dæmonomania*, or else by a species of wild fanaticism, the evidence or effect of madness, but certainly not the cause—secondly, that a merely formal service, in which the heart has no part, fails to give support in the time of trial, and is the precursor in madness of suicidal despondency—thirdly, that the flighty views which spring from imperfect instruction in the truths and requirements of the Christian religion, lay open the mind to the reception of the dogmas of ignorant enthusiasts, who mistake excitement for the motions of God’s Holy Spirit within them, and find their representatives in our wards among the maniacal and melancholic cases; in these persons, who have mistaken excited feelings for signs of the favour of God, the depression which at length follows is regarded as an evidence that they are forsaken by the Almighty; life itself is insupportable to them, as they imagine that each moment increases the amount of their guilt, and while declaring their terror of death they seize the first opportunity of self-destruction: and fourthly, that the cases of those who have been brought up in certain religious views, and have subsequently from circumstances or from curiosity gone to places of worship where doctrines of an opposite kind have been taught, supply by far the largest amount of, so termed, religious insanity, when there has been at all a sincere, however erroneous attention, paid to spiritual concerns. Thus one brought up as an Arminian (W. P.) who had been taken to a chapel where high Calvinistic tenets were propounded, was alarmed, and on becoming insane thought himself excluded from mercy because not one of the elect. On the other hand, a patient, (C. W.) who had been brought up a Baptist, having been taken to a Wesleyan chapel, was excited by expressions which the ordinary frequenters of that place of worship would have scarcely noticed, and having become insane, is constantly harping upon her having undergone the new birth,” &c.

Whilst the Rev. Mr. May asserts that deficient, defective, and unsettled views of religion are often more or less the *forerunners* of insanity, it is gratifying to hear him state, as the result of his observation, that sound and Scriptural religion, not merely *does* not *cause*, but tends to *avert* insanity, often sustaining the mind, which would otherwise have given way, and when a person has from other causes become insane, has still in very many cases afforded consolation, and tended, by calming the spirit, to aid in the recovery.

Mr. May remarks:—

“I do not regard it as a matter of importance to inquire whether the ministrations of the clergyman tend directly to the recovery of the patients.”

Why should he not make such inquiries? Surely he would not be exceeding his legitimate duties by ascertaining what assistance he has rendered in his religious ministrations towards the cure of those who have been under his spiritual care.

In certain stages of insanity, when the medical treatment advised and carried into effect by the medical officers has properly fitted the mind of the patient for the judicious instruction of the chaplain, he may undoubtedly aid in promoting the recovery of the patient, by gently and discreetly bringing to bear upon the patient's mind the comforting, soothing, and holy influences of religion. Surely he might, with great propriety, inquire of the medical officers whether "his ministrations had tended indirectly to the recovery of the patients," and thus throw light upon an important point in the moral treatment of the insane.

Mr. May is evidently anxious not in the slightest degree to interfere with the legitimate functions of the medical officer, and we commend him for his wisdom and good feeling. He says:—

"I urge those who are restored, to thank God who has blessed the remedies of the physician, and it is always a point with me to tell those whom I visit, that I come to them as the minister of the gospel, to teach them the things which belong to their souls' peace and comfort, and that with their being in the asylum I have nothing to do. When this matter is settled, it rarely occurs that I am unable to obtain a quiet hearing even from those most anxious to leave, or most distressed in mind, and if, after a few words of kindness and instruction and a short prayer, I have left, as very frequently I have, a patient sitting quietly in the ward, reading a book, or, in the case of a female, employed with a simple piece of work, I consider that at least an opening has been afforded for the more efficient application of the remedial measures, which belong to the province of the physician.

"My intercourse," says Mr. May, "with the insane, convinces me that it is our duty to act with respect to the immortal soul, as if no lesion of the brain existed. The action of the mind upon the material organ, and the reaction of the diseased brain upon the mind, are matters which can never be explained satisfactorily—for *sound philosophy takes no cognizance of such a connexion.*"

We are not disposed to criticise too captiously the phraseology of this passage. We feel, however, assured from the context that Mr. May does not really mean what is implied in the preceding quotation. Mr. May asserts that it is the clergyman's "duty to act with respect to the immortal soul, *as if no lesion of the brain existed.*" This is manifestly erroneous. *It is* the duty of the chaplain, in his ministration, to consider with great care the existing lesion of the brain, for his attempt to influence religiously the mind of the insane might, in certain morbid conditions, or, to use Mr. May's own term, "lesions" of the brain, be productive of the most dire and disastrous consequences.

Again, we ask, does not "sound philosophy take cognizance" of the connexion between "the action of the mind upon the material organ," and "the reaction of the diseased brain upon the mind?" The practical psychologist may be unable to explain satisfactorily the nature of their mysterious connexion, but he certainly fully recognises the fact, and "takes cognizance of the connexion." Having thus cursorily glanced at Mr. May's interesting record, we next, in rotation, come to the "Matron's Report." With what a glorious exordium does Mrs. Macfie open her matronly battery! How proud, how gratified, must she have felt; what an intense consciousness this model of matrons must have had of her noble and elevated position, when, with her "grey goose quill" (we have no wish to perpetrate an odious pun) she sat in profound contemplation before penning the sublime and heroic passage with which she commences her report:—ANNO DOMINI 1856 HAS PASSED PEACEFULLY OVER THE FEMALE SIDE OF THE ASYLUM."

At the Colney Hatch Asylum 137 male patients were admitted during the last year, of which—

"The types and complications of the disease, were as follow:—

Mania, uncomplicated	. . . . .	18
Melancolia	"	18
Monomania	"	25
Dementia	"	14
Mania complicated, with General Paralysis	. . . . .	4
" " " Epilepsy	. . . . .	2
Dementia " " General Paralysis	. . . . .	31
" " " Epilepsy	. . . . .	20
Congenital Idiocy and Imbecility	. . . . .	5
Total		137

Contrasted with this statement, it may be mentioned that—

There have been discharged, Cured	. . . . .	38
" Relieved	. . . . .	14
" Unrelieved	. . . . .	2
" Died	. . . . .	76

Total discharged and dead 130

Respecting the fatal cases, it is interesting to observe—

"A large number of the deaths has been ascribable to disease of the brain in association with 'general paralysis,' no less a proportion than 57 per cent. having been thus occasioned. Indeed, the number of patients who have succumbed to this exhausting form of disease, during the past year, is almost equal to that of the average of residents so affected; yet their number does not diminish, thirty-five new cases having been received, and ever and anon the case of some older resident becoming thus unfavourably and fatally complicated.

Of this form of paralytic disease, have died . . .	44
Of epilepsy	14
Of phthisis	6
Of atrophy, and decay of age	9
Of suicide	1
Total	76

In the female department of the Asylum—

“The admissions for this year have amounted to 140 in the female department of this institution, the discharges 40; of these, 24 were recovered, 10 relieved, 3 removed to a workhouse, 3 to other asylums, and 4 upon trial; whilst 61 have died during the past year.”

Again, with reference to the mortality, which amounted to 61 cases, the ratio was—

“Rather more than eight per cent., nearly double that of last year; a circumstance not altogether unlooked for, considering the amount of extreme chronic disease that is prevalent among so large a class of patients, many of whom have been in confinement for several years prior to their admission into this institution. The causes of death have been the following, viz. :—

Phthisis	14
„ with epilepsy	4
Bronchitis	1
Broncho-pneumonia	4
Hydrothorax	1
Disease of the heart, dilatation	1
Gangrene of feet from disease of heart	1
Epilepsy	6
Paralysis, convulsions and coma	16
Chronic gastritis	1
„ peritonitis	1
Atrophy	1
Scrofula	1
Cancer of mouth, tongue and fauces	1
Suicide	1
Typhoid fever	1
Natural decay	6

“Thus it appears that rather more than one third died from disease of the chest and respiratory organs, which seems to be one of the most fatal concomitants to mental disease, next to paralysis and epilepsy.”

At the Surrey County Asylum, in the male department,—

“The discharges and deaths have been as follows :—

Recovered	61
Uncured	23
Died	75

Leaving in the Asylum 407”

Again, by the Report it appears—

“The deaths have resulted from the following causes :—

General paralysis	22
Apoplexy	3
Epilepsy	4
Pulmonary disease	14
Disease of the heart	2
Decay of nature	7
Exhaustion and other causes	23

"The mortality is rather higher than usual, owing chiefly to a large number of cases of general paralysis, which had accumulated, and terminated fatally; and also to the fact (I regret again to report to you) that several patients when admitted were in so advanced a stage of bodily disease, that they died within a few weeks. I think the removal of such cases to an asylum is an evil, which ought not to be sanctioned by relieving officers and others, whose duty it is to sign the certificates of admission."

On the female side of the same institution,—

"During the year 92 have been admitted, 37 have been discharged recovered, 21 have been removed by their friends or respective parishes, and 36 have died; leaving in the asylum this day 515 female patients.

"One Coroner's inquest has been held, a verdict being returned of 'Natural death from an epileptic fit.'

"The causes of death have been as follows, viz.:—

Paralysis	10
Epilepsy	6
Cerebral disease	3
Decay of nature	7
Pulmonary disease	4
Hydrothorax	1
Erysipelas	1
Disease of the heart	1
Fever	2
Scrofula	1
Total	36

Much has recently been said in reference to the use of prolonged shower baths at this Asylum. Into that subject it is unnecessary again to enter. We, therefore, shall only quote the new regulations which the Committee have recently promulgated:—

"First. That neither of their medical officers shall in future administer any shower-bath without entering in the 'case book,' and reporting to the committee at their next meeting, the cause, the duration, and the effect thereof, together with the name of the patient on whom, and the date when it was applied.

"Secondly. That inasmuch as such baths may be dangerous in cases in which the heart of the patient is diseased, the medical officer regard it as his duty in all cases, before such a bath is administered, to examine the patient very carefully, to ascertain, as far as may be possible, whether by reason of diseased heart or other disease such a bath may not be dangerous.

"Thirdly. That for the future no new treatment of the patients, or extension of the previous practice, which may by possibility lead to results dangerous to the life or injurious to the health of the patients be left to the attendants; but that the effect of such new treatment, or extension of previous practice, be carefully watched by the medical officer who prescribes it, and fully reported in the 'case book.' "

At the Devon County Asylum, the last Report issued states:—

"During the past year 156 patients have been admitted, of whom 85 are men and 71 are women. The number of patients at the commencement of the year was 478. The average number resident has been 490; and the number resident at the present date is 520, of whom 232 are men, and 288 are women. Forty patients have died, of whom 21 were men, and 19 were women. Seventy-two patients have been discharged, of whom 28 were men, and 44 were women. The mortality has been in the ratio of 8 per cent. to the average number resident, and in that of 6·5 per cent. on the total number under treatment. Of the 72 patients discharged, 65 were recovered, 3 were discharged as relieved, and 4 are absent on trial.

"The admissions during the past year have been remarkable for the number of patients with propensities to commit suicide, and for the urgency of the symptoms displayed by them. No fewer than 55 of the patients admitted were stated on their admission papers to suffer from this lamentable propensity. Some were admitted with throats actually cut, and others with marks of violence inflicted for the purpose of self-destruction."

The Dorset County Asylum Report next presents itself to our notice. According to this official document,—

"On January 1st, 1855, there were in the asylum 148 patients—viz., 66 males and 82 females, since which time 26 males and 38 females have been admitted, 18 males and 20 females discharged, and 4 males and 11 females have died, and removed to Fisherton Asylum 3 males and 6 females. The number on the books now is 67 males and 83 females, and at Fisherton 21 males and 26 females; therefore the whole number belonging to the county and actually under treatment is 197—viz., 88 males and 109 females.

"It will be observed that the number admitted this year is the largest ever recorded since the opening of the Asylum. In the year 1846 the admissions were 27 males and 29 females—total, 56; whilst this year the numbers were 26 males and 38 females—total, 64."

The Lancaster County Asylums comprise two institutions, viz., one at Lancaster and another at Ramhill. Respecting the first-named, it appears,—

"During the past year 186 patients have been admitted—men, 95; women, 91—being 2 more upon the whole than were received in the previous year. Although the character of these cases does not differ materially from the admission of former years, nor call for any special notice, yet it is worthy of remark that in asylums where no selection

of patients can be made, it must of necessity happen that the yearly influx of epileptics and patients suffering from general paralysis, or in other words from incurable forms of disease, must add greatly to the permanent residents. This is an evil incident to all county asylums, and the older the establishment the more oppressive is the burden."

Again, at Ramhill, it appears,—

"Of the 92 patients admitted during the year, 19 had had former attacks of insanity, and 12 had previously been under treatment in asylums; 6 at this institution, 2 at the Lancaster Asylum, and the remaining 4 at other public asylums. Sixty-one patients—namely, 28 men, and 33 women, have been discharged recovered, during the past year. Of these, 6 men, and 5 women, were previously out on trial for a month, and one man for two months. The recoveries during the year have been at the rate of 66·30 per cent. upon the admissions, a much higher proportion than has occurred in any previous year since the opening of the asylum. This high per-centage is in some measure due to the recovery of several patients whose mental malady had long assumed all the characters of chronic insanity."

Numerous other reports—some of much value—well deserve being specially named in the present analysis of important documents of that description, with which our table is now covered; all being kindly forwarded by the respective medical superintendents or other official gentlemen connected with the different establishments described; to all of whom our best thanks are justly due, and are now expressed. We should have liked to notice each at considerable length—commensurate with their intrinsic importance—but our limited space now at command renders that task, however agreeable it would unquestionably prove, at present out of the question. Such being the position in which we are thus placed, and against whose imperious necessity it is difficult to contend, we can only now briefly allude to the important public documents still remaining for analysis.

Mr. Green, medical superintendent of the Birmingham Lunatic Asylum, in his last report, states:—

"During the year, 126 patients have been admitted, of whom 78 were males and 48 females; which together with the 285 left at the end of the previous year, make a total of 411 who have been under treatment. Of this number, 57—being 45 per cent. upon the admissions—have been discharged cured, and 11 others so far improved as to be fit for restoration to their homes. Thirty-three of the admissions were private patients, all of whom were males, a circumstance which will be again adverted to in a future part of the report."

Regarding the Essex Asylum, Dr. Campbell, the medical superintendent, observes:—

"Between the 25th of December, 1854, and the 25th of December last, there were received into the asylum, 61 male and 68 female

patients; total, 129. There died within it, 20 male and 28 female patients; total, 48. And there were discharged from it, unimproved, 2 males; improved, 2 males; and recovered, 22 males and 28 females; total recovered, 50. Since it was opened in September, 1853, up to the 25th December last, there have been received into it, males 265, females 303; total, 568. On the 25th December last there were remaining in it, males 139, females 195; total, 334."

Dr. Huxley, of the Kent Asylum, remarks in his report, that the number of patients admitted during the past year was 192, of whom 108 were male, and only 84 female lunatics; 71 recovered, and 61 died, both sexes comprised. The aggregate inmates remaining being 599, on the 4th of July last.

At the Manchester Royal Lunatic Hospital, Dr. Dickson reports:—

"During the twelve months which have since elapsed, forty-five cases have been admitted, nineteen of which are males and twenty-six females; making altogether one hundred and thirteen patients who have been under treatment during the year. Of this number forty have been discharged, leaving at this date seventy-three patients in the hospital. The average number daily resident throughout the year has been 75·7. Of the forty patients discharged twenty-two were cured, being in the ratio of nearly 49 per cent. on the number admitted, and 29·25 per cent. on the average number resident."

From the Leicestershire and Rutland Asylum, of which Dr. Shaw is the visiting physician, it appears:—

"The greatest number of patients in any one day was 310, the number in the house on the 31st December, 1856, was 304, being an increase of 9 on the number present on the 31st December, 1855.

"During the past year 107 patients were admitted; the number under treatment during the year was 402, of these 53 have been discharged cured, viz. 23 males and 30 females, and 11 have been discharged relieved, viz. 7 males and 4 females, making a total of 64 who have left the asylum.

"The number of deaths during the year has been 29, and the rate of mortality on the average number of patients has been 9·60 per cent., as will be seen by reference to Table No. 2,—a rate of mortality which, though slightly above that of last year, is still below the average rate, during the existence of the asylum."

In the Lincolnshire Lunatic Asylum, at Bracebridge, whereof Dr. Palmer is medical superintendent:—

"It will be observed, that at the close of the year 1854 there were 243 patients in the asylum, of whom 120 were men, and 123 women, and that during the year 1855, 32 men and 30 women were admitted; thus making the total number under treatment 305, viz.—152 men, and 153 women.

"Of these, 2 men and 2 women were discharged relieved, 13 men and 10 women were sent out recovered, and 10 men and 13 women died,

making the total of discharges and deaths 50; viz., 25 men and 25 women, and leaving in the asylum at the end of the year 255 patients, consisting of 127 men and 128 women.

"The average daily resident numbers were 122·15 of men, and 127·37 of women, being 249·52 of both sexes collectively."

According to the report of Dr. Allen, medical superintendent of the asylum at Abergavenny:—

"At the close of 1855 there remained in the asylum 257 patients, viz., 114 males and 143 females. During the year 1856, 116 patients have been admitted, viz., 62 males and 54 females: of these, one male was a criminal lunatic, admitted under a warrant of the Secretary of State.

"The re-admissions during the year amounted to 17, viz., 7 males and 10 females.

"The discharges during the year have amounted to 57, viz., 34 males and 23 females: of these, 33 males and 20 females were recovered or relieved; 1 male (the criminal lunatic) succeeded in effecting his escape, and 3 females were discharged on the solicitation of friends, and on the agreement that they were to be properly looked after and taken care of.

"The deaths during the year have amounted to 34, viz., 20 males and 14 females; 15 of the deaths occurred in persons advanced in life, varying from 58 to 83 years of age; and the average duration of life in the whole number was 51 years."

Dr. Nesbitt, superintendent of the Northampton General Asylum, says, in his recent report, that:—

"During the past year we have received 64 inmates, 26 being private and 38 pauper. This is a smaller number than we have been accustomed to admit for the last few years; but it will be recollected that we not only served notices in 1854 on the different Unions in the County that the house was then more than full, but that we came to the resolution of not admitting a private patient under one guinea a week.

"Of recoveries in the last year there have been 21. Many of these expressed both in prose and verse their thankfulness that in the hour of their extremity they here found 'a city of refuge.' Most of them are now engaged in their different vocations, whilst others are able to lead a quiet life among their friends.

"The mortality is large in proportion to the numbers in the house. It amounts to 34, on the average daily number of 261, or, in other words, something over 13 per cent. The deaths in 1854 were only 10½ per cent. The average age at death for the past year was 48. Of those admitted during the year 10 died, all being at the time of admission in a more or less enfeebled state. One died within a few hours of arrival, having been previously suffering from severe depletion, and the fatigue of a long journey. It is a remarkable fact that the deaths should be in an inverse proportion to what might be expected; for while out of the 38 pauper patients 3 only died, as many as 7 died out of the 26 private patients. The explanation, however,

of this apparent anomaly is not difficult. For there are greater facilities in the classes above pauperism to meet the infirmities of their friends at home, and better means of protecting them there, than the poor can command. Hence their condition, on admission, is often, both physically and mentally, a more deteriorated one. Many of them have already been inmates of private asylums, and are sent here when their cases are hopeless, and their habits depraved and offensive."

From the General Asylum, near Nottingham, Dr. Williams, the visiting physician, and Mr. Stiff, the superintendent, say:—

"They have had greatly increased admissions in comparison with the last year, many of them of a dangerous and most suicidal character.

"The numbers admitted have been 66, viz., 36 men and 30 women. The great majority of these were from Nottingham and its immediate neighbourhood.

"Of the 66 admissions, one half, viz., 15 females and 18 males were suicidal. Their unhappy state was, in many instances, produced by distress of mind from losses in business, absence of work, and consequent poverty, which resulted from their occupations and employments in the several branches of trade in and near Nottingham.

"There has been an excess of male admissions in both classes of patients, notwithstanding that the excess of the female population in the town of Nottingham is 4277, and in the county 903. We believe this excess in proportion of admissions to have been accidental, as sometimes the one sex has predominated in the Asylum and sometimes the other.

"Sixteen patients had hereditary disposition to insanity, and 9 had the disease induced by habits of intemperance.

"The number of discharges and deaths were 71; of these we have discharged cured, 23; relieved, 9; harmless chronics, 11; not improved, 4; died, 24. The deaths were chiefly from the usual causes which prevail in asylums, viz., apoplexy, paralysis, epilepsy, and phthisis pulmonalis."

At the County and Borough Asylum of Snenton, it is stated by the Report of Dr. Stiff, the resident physician, that:—

"On the 31st December, 1855, there remained 230 patients,—viz., 120 men and 110 women. During the year 1856, 45 men and 44 women were admitted, together 89, making a total of 319 under care and treatment. The recoveries have been 30, in equal proportions of the sexes. Ten were discharged relieved, 3 not improved, 17 died, and 36 were removed by the Union authorities as harmless chronic lunatics. There now remain 120 men and 103 women.—Total 223."

By the report of Dr. Oliver, medical superintendent of the asylum for the counties of Salop and Montgomery, it appears that:—

"On the 1st of January, 1856, the number of patients in the asylum was 315 (viz., 149 males and 166 females). In the course of the year

exactly 100 patients (viz., 52 men and* 48 women) were admitted; 37 (viz., 17 men and 20 women) were discharged recovered; 18 (viz., 9 men and 9 women) were discharged relieved; 3 (viz., 1 man and 2 women) were discharged not improved; and 33 (viz., 19 men and 14 women) died.—The number of patients remaining in the asylum on the 31st December, 1856, was consequently 324 (viz., 155 men and 169 women) an increase on the number of those remaining at the end of the previous year of 9 (viz., of 6 men and 3 women)."

Dr. Boyd, the superintendent of the Somerset County Asylum, observes, in the ninth report of that institution, that:—

"During the year 1856 there were 133 admissions, 73 males and 60 females. 30 males and 35 females were discharged recovered; 4 males and 6 females relieved; 10 males and 1 female not improved; 1 male and 2 females out on probation; 16 males and 20 females died; remaining 167 males and 191 females. The number of males discharged not improved is more than usual, four male patients from Bedminster having been twice discharged during the year; first in February, in consequence of the higher rate of payment charged to boroughs which had not contributed to the building having been refused; these patients were, however, again returned in a few days, and the higher rate has since been paid: on the 27th December they were finally transferred to the Hospital for Lunatics for the borough of Bristol. Although there is an increase of 9 remaining, over the corresponding period of the previous year, still it is hoped that no further addition to the asylum will be required."

At the Staffordshire County Asylum, Dr. Bower says:—

"The admission of patients into this asylum from January 1st to December 31st, 1856, has very nearly corresponded to that of the preceding year; the numbers being in 1855—174; in 1856—172.

"The average of those resident in 1856 was 412, as compared to 398 in 1855.

"410 patients remained in the house on December 31st, 1856; whilst 406 was the amount at the end of 1855.

"The average number of recoveries in the two years has been nearly equal, since on a mean resident total of 412 in 1856, there were 59·39 per cent.; whilst in 1855, the average being 398, the recoveries were 52·29; thus showing a slight advantage for 1856 over the former year."

Dr. Kirkman, in his late report of the Suffolk Asylum, states that during 1856 the admissions of new patients amounted to 88, comprising 42 males and 46 females; 20 males, and 18 females having left cured, while 15 of the former, and 12 of the latter sex died, or a total of 27 deaths; while the aggregate

* None were both admitted for the first time, and re-admitted within the year, excepting one woman. This circumstance reduces the number of females received to 47 individuals, and the aggregate number of individuals of both sexes admitted during the year 1856 from 100 to 99.

number remaining on the 31st of December, were 130 males and 155 females, or 285 patients altogether.

According to the sixth annual report of Dr. Thurnam, medical superintendent of the Wilts County Asylum:—

“At the commencement of 1856 there were 301 patients under care—namely, 141 men and 160 women. During the year, 100 have been admitted—39 males and 61 females; of whom 20—6 men and 14 women—were re-admissions. The number in the asylum at the date of this report, is 314—145 men and 169 women. The average number resident during the year has been 304.

“Of those discharged, 52 were registered as recovered;—a proportion exceeding half the number of the admissions, and which cannot be regarded as other than favourable.

“No serious epidemic disorder of any kind has prevailed; and the general health of the patients has been good.

“There have been 28 deaths—16 of men and 12 of women; the mortality being at the rate of 9·21 per cent., which is 2 per cent. lower than the mean rate of mortality during the 5·35 years since the opening of the asylum.

Mean Annual Mortality.	Males.	Females.	Both Sexes.
For the year 1856 . . .	11·53	7·25	9·21
For 5·35 years*—1851-56 .	13·15	9·46	11·14

“Among the deaths, have been four from general paralysis—a disease so fatal to the insane, and almost peculiar to them. The number of deaths from this disease now recorded is greater than in any former year. In the case of one epileptic patient found dead in bed, a coroner’s inquest was held; the verdict being, ‘died suddenly by the visitation of God.’ Death in this instance probably occurred from a fit of epilepsy during sleep, which at once proved fatal; the patient appearing to have died almost without a struggle, and being found in a recumbent attitude, and with an aspect of perfect composure.”

In the report of the asylum for the county and city of Worcester, Dr. Sherlock, the medical superintendent, says:—

“At the end of the year 1854 there remained under treatment in the asylum 218 patients, 104 males and 114 females. During the current year 101 patients have been admitted, 53 males and 48 females, making a total of 319 which have been under treatment: 38 patients have been discharged recovered, in equal numbers from either sex. Twelve have been removed improved, 7 males and 5 females, not a few of whom were at the period of their removal in an advanced stage of convalescence, while others were cases of a chronic and, so far as could be judged, of a harmless character, for whose care and protection various provision would be made by friends or others. In each case of this description particular regard has been paid to the position in which the lunatic was to be placed. This number also includes the cases of patients transferred to other asylums, subsequently to the fixing of their settlements.

* Viz., from the opening of the Asylum, Sept. 19th, 1851, to the end of the year 1856.

"The deaths during the year amounted to 39, of whom 24 were males and 15 females.

"The average number resident throughout the year was 231, 110 males and 121 females.

"The number of cases admitted and under treatment exceed those recorded in the Report of the previous year by 13 and 20 respectively."

At the pauper asylum for the West Riding of York, Dr. Alderson, the medical superintendent, reports that :—

"On the 1st of January, 1856, the number of patients resident in the West Riding Asylum were 356 males and 411 females; since that time 141 males and 155 females have been admitted, making a total under treatment of 1063, and an average daily number resident throughout the year of 803.

"The discharges during this period were 279 from all causes, viz., 55 males and 67 females recovered; 23 males and 29 females relieved; 1 male not improved; and 50 males, 54 females died; thus leaving 784 patients resident on the 31st of December."

Dr. Cassow, of the Hull Borough Asylum, reports :—

"The admissions to have been equal to the discharges and deaths combined, viz., 15 males and 17 females, so that precisely the same number of each sex were in the asylum on the first day of the year as the last, a somewhat remarkable circumstance; not more so, however, than that anomaly which the statistics of the asylum present in the relative proportion of the sexes.

"Since the opening of the asylum, the males, with one or two very short exceptions, have preponderated over the females, to the extent of from 4 to 6, whereas, taking the asylums generally throughout the country, probably nearly all contain a larger proportion of the softer sex; the female being apparently more prone to insanity than the male.

"The percentage of recoveries on the number admitted, was $56\frac{1}{2}$, in addition to which 4 were discharged much relieved, of whom 3 continued so well after their release as to be convalescent up to the present time; therefore the average number of cures were, in fact, nearly 66 per cent., being higher than that of the English asylums generally.

"The percentage of deaths, taken on the mean daily number resident ($89\frac{3}{8}$) was $11\frac{1}{2}$, a shade lower than that of the previous year, and I believe 2 or 3 below the average rate of the English institutions."

At the North and East Riding Asylum, Clifton, Yorkshire, Dr. Hill, the superintendent, reports that :—

"During 1856 the admissions were 95, of whom 58 were male and 37 female lunatics; 11 males and 9 females were discharged cured, while 16 of each sex died, making 32 deaths altogether. The total inmates remaining under treatment, on the 31st December last, being 191 male and 164 female lunatics; thus making an aggregate of 355 individuals then resident."

The report of the medical officers of the Norfolk Lunatic

Asylum, at Thorpe, must also be noticed. According to this public document, it is stated that:—

“On 31st December, 1855, there were in the institution 293 inmates, namely, 135 male and 158 female patients. During the past year 85 inmates have been admitted, namely, 41 male and 44 female patients. The whole number under our care has therefore been 378—175 male and 202 female patients. The number of discharges has been 41, namely, 21 male and 20 female patients; of these 39—20 male and 19 female patients have recovered, and 2—1 male and 1 female were relieved. During 1856 no patient has been removed without improvement. The number of deaths in 1856 has been 37—18 male and 19 female patients.”

Before taking leave, for the present, of the medical superintendents of English asylums, and the very valuable professional Reports which they annually lay before their respective Boards of visiting justices, or other public functionaries, one more of these often instructive documents yet remains to be mentioned, viz., that of Dr. Bucknill, the experienced medical superintendent of the Devon County Asylum, who says:—

“During the past year 156 patients have been admitted, of whom 85 are men and 71 are women.

“The number of patients at the commencement of the year was 478. The average number resident has been 490: and the number resident at the present date is 520, of whom 232 are men and 288 are women.

“Forty patients have died, of whom 21 were men and 19 were women.

“Seventy-two patients have been discharged, of whom 28 were men and 44 were women.

“The mortality has been in the ratio of 8 per cent. to the average number resident, and in that of 6·5 per cent. on the total number under treatment.

“Of the 72 patients discharged, 65 were recovered, 3 were discharged as relieved, and 4 are absent on trial.

“The admissions during the past year have been remarkable for the number of patients with propensities to commit suicide; and for the urgency of the symptoms displayed by them. No fewer than 55 of the patients admitted were stated on their admission papers to suffer from this lamentable propensity. Some were admitted with throats actually cut, and others with marks of violence inflicted for the purpose of self-destruction. The form of disease under which the greater part of these patients laboured was that of melancholia: in a considerable number, however, the symptoms were those of high cerebral excitement; and, in the absence of the suicidal propensity, would have been considered as undoubted cases of mania. The presence of this symptom would not seem to afford a sufficient reason for excluding them from a class to which they would otherwise belong. The manifestations of insanity observed in the wards of this institution as fully justifies the use of the term ‘suicidal mania,’ as that of ‘suicidal melancholia,’ which has long been in common use.

"In suicidal mania the head is usually hot, the aspect fierce, and the general symptoms those of excitement: the propensity to self-destruction is frequently accompanied by a general tendency to commit acts of violence. The general excitement also undergoes marked periods of remission, and during these periods the suicidal passion suffers abatement. These cases indeed, in addition to all the ordinary symptoms of mania, present a violent and impulsive desire to commit self-destruction:—this desire, or passion, is too urgent and vehement to be correctly designated by the common term—inclination or propensity. It is sometimes associated with delusions of such a nature that they may be supposed to have given rise to the morbid desire, or to have been occasioned by it; or, what is yet more probable, to have originated in the same morbid condition of the brain. Thus one man believed that he saw demons around him, who called upon him to join them in an incarnate state: another believed that he heard a voice from heaven, calling upon him to sacrifice himself in order to put his enemies to shame. More usually, however, in suicidal mania there is no delusion bearing upon the morbid passion."

Other important topics discussed by the able author just quoted might be advantageously noticed in the present analysis; but however anxious to extend our review of this, and likewise of various previously-cited official reports, we must refrain reluctantly, in order to proceed towards another portion of the British Empire—namely, North Britain.

Although the condition of lunatics in Scotland has formed the subject of a special article in a former part of this number, when speaking of the Report issued by Parliament, and drawn up by the Lunacy Commissioners sent to investigate the present state of lunacy in that portion of Great Britain, nevertheless, several annual reports detailing the transactions which have characterized the past year at some of the chartered asylums in that country, deserve perusal, especially as they amply show that the barbarities which have been unveiled at other places, did not in any manner prevail within the precincts of those useful public institutions. That is a truth which cannot be too extensively disseminated throughout the Empire.

The first public receptacle for lunatics to which attention will now be directed, is the Glasgow Royal Asylum.

There, during 1856, the admissions were greater than in the preceding year, the total number being 217, of whom 118 were males, and 99 females, thus showing the former sex predominated. Respecting the patients admitted:—

"Several of all classes when received were hopelessly ill, their malady being complicated with epilepsy, paralysis, or some other organic disease tending to shorten life. One female had had her arms so long bound with cords before she was brought hither, that she had lost the power of one of them completely; another had a miscarriage shortly

after her arrival; while a third had been seventeen years insane before admission, having been kept at home during the whole of that period."

In reference to the causes usually assigned :—

"It is generally found that, of the insane, the unmarried are in excess of the married and widowed. Here the opposite has sometimes prevailed. This year the two classes are nearly equal.

"When the hereditary cases, and those who had previously laboured under insanity are excluded, it will be found that among the males the cases arising from physical causes greatly predominate over those arising from moral, while among the females they are nearly equal.

"In two females the disease arose from immersion in hot baths at too high a temperature. In one case, a plethoric young woman, the temperature of the water was 111° Fahrenheit. She became maniacal a few hours after being taken out. This patient had previously laboured under insanity, but had been long well before she was subjected to a trial of this powerful excitant. The other patient had suffered occasionally from epileptic vertigo, for eighteen months or so, when she was placed in a bath at a temperature of 110°, and became insane shortly afterwards. Although the cases arising from intemperance are fewer than last year, we still find that it occupies the first place among the distinctly ascertained causes. The numbers under this head, however, do not give a fair view of the actual number of individuals admitted from that cause, as two were admitted and dismissed more than once from intemperance during the year. Those addicted to this vice are in general easily cured of the first attack; but after repeated seizures they sink into confirmed and incurable insanity."

Respecting dismissals :—

"The aggregate numbers were rather fewer this year, but the number cured has been much higher—being this year 91, and last year 69. Our returns confirm the general belief that insanity is more curable in females than in males. This, however, is easily accounted for. Females lead a more quiet and regular life; they are much less exposed than males; they seldom become paralytic—which is the most unfavourable of all the complications; and their insanity is often dependent on the derangement of the functions peculiar to their sex.

"It is interesting to notice that a considerable proportion recovered at an advanced period of life. Thus, twelve males and nine females were cured who were upwards of fifty years of age; two, a male and a female, were nearly eighty. These cures were nearly equally distributed throughout the year. The greatest number of recoveries has, as usual, been among those who laboured under the maniacal form of the malady. The majority of those who recovered had been placed under treatment at an early stage of the disease. Thus, of the 91 cured, 64 had been admitted within two months of the commencement of their illness. A few were dismissed well after many years' residence."

Again :—

“The deaths were less in number this year than the last, although several patients were in a dying state on admission. Others had long suffered from organic chest affections. One of the male patients died twenty-two hours after admission, having been in a state of collapse when admitted. A female was brought in labouring under advanced phthisis pulmonalis, and survived only a few days. A number of the patients who died were of an advanced age. Some of them had been from six to twelve years in the house. The chief cause of death was phthisis pulmonalis. A male patient died from gangrene of the lungs. The extreme and peculiar fœtor of his breath, for some days before his death, indicated that in all probability this condition existed. By a *post mortem* examination, the upper half of the right lung was found to be a gangrenous mass.”

The only other point of interest to which space allows reference to be now made, is, the pathological appearances observed in the cases which terminated fatally. According to the Report now under review, it is stated that

“A considerable number of bodies were inspected during the year. In every case the brain and its membranes were found to be more or less diseased. The following were the chief morbid conditions in the head:—Skull thickened, bones hard, compact without diploe; dura mater thickened, and in several instances considerable osseous spiculæ were found developed in it; pia mater opaque, thickened and infiltrated with serous fluid; serous fluid in the ventricles, with ulceration of their surface. Some brains, where chronic and violent mania had existed, were unusually hard. One well marked instance of softening of both grey and white matter of the brain was found: the patient had been acutely maniacal. In the great majority, disease was also found in other cavities, and was the immediate cause of death.”

The treatment, occupations, and amusements of the patients are next adverted to by the physician superintendent, Dr. M'Intosh, but into those interesting questions we cannot now enter. They seem to have been much of the usual character, fully indicating that these important features in the management of all well-regulated public asylums were not overlooked at this large institution.

The Dundee Asylum next occupies attention. At this public institution

“During the past year 35 patients have been admitted to the Asylum, of whom 22 were males, and 13 females.

“At the date of the last Annual Court there were 210 patients resident; thus 245 individuals have been treated in the Institution during the year. The daily average number resident having been 216.

“35 have been removed during the year, of whom 19 were recovered,

5 not recovered, and 11 have died; leaving at the close of the year 210 inmates.

"The number discharged recovered was thus in the proportion of 54 per cent. to the admissions. The number of patients admitted since the opening of the Institution amounts to 1625; and of these 742 have recovered, being within a fraction of 46 per cent. If, however, the patients still remaining under treatment be deducted, the per centage is raised to $52\frac{1}{2}$. And it is obvious that this deduction must be made if we would render the calculation as accurate as possible, otherwise the quota of recoveries which we may happily expect to be drawn from the 210 sufferers still under our care is unrecognised, and is made actually to throw its weight into the scale of non-recoveries.

"The mortality during the year has been 5 per cent. upon the average number resident, or $4\frac{1}{2}$ upon the whole number under treatment during the year. The average annual mortality during the last six-and-twenty years has been 5.78 per cent. Thus showing that the number passing away from our community by death has been somewhat below the average of past years, although exactly the same number of deaths have occurred this year as during the previous year. The measure of physical health and longevity with which our community has been blessed will be more easily appreciated, if it be mentioned that the most experienced authorities have arrived at the opinion that in an asylum such as this, devoted to the treatment of both upper and lower classes of patients, a mortality which exceeds 9 or 10 per cent. is usually to be considered as unfavourable, and one which is less than 7 per cent. as highly favourable. Our average annual mortality having been 5 and a fraction per cent., as above stated, indicates that the conditions tending to maintain bodily vigour are uncommonly complete, affording matter for much satisfaction."

Respecting the mortality, it appears

"Eleven patients have died during the year, of whom 9 were males, and 2 females. The diseases to which they succumbed were principally of that intractable nature which afforded little room for hope that the impending danger could be averted. 4 males and 1 female died of marasmus, or the exhaustion of the vital powers induced apparently by protracted and agonising delusions. One of these male patients presented the only instance during the year of abstinence from food to so determined an extent as to require the use of the stomach-pump. Several instances occurred in which, under the influence of various delusions, there was a temporary repugnance to take food, but the difficulty was always overcome by some other expedient short of the means referred to. In one of these instances, a gentleman refused all food under the impression that it was the vehicle of poison. No persuasion could shake his conviction. Interference became necessary; but when the stomach-pump was produced, and preparations made for its use, he took food voluntarily.

"There were two deaths, both males, during the year, from pulmonary consumption.

"Two persons, a male and a female, died of that formidable complication named the general paralysis of the insane.

"Of the remaining two male patients who died during the year, one was cut off by chronic bronchitis. The other sunk from an attack of inflammation of the lungs, following upon a very severe and almost fatal fit of epilepsy. During the last six years his mind had been quite a blank; he never uttered a rational sentence; and the jargon which occasionally fell from his lips was broken and disjointed, as if he had great difficulty in articulation. His movements of both extremities were unsteady and ill-balanced. His whole nervous system seemed to have undergone a process of disorganization; nevertheless, it was a remarkable fact that the *post mortem* examination failed to reveal any departure from the ordinary structure of the nervous apparatus. The usual appearances of recent and extensive inflammation were found in the lungs, which explained his death; but the epilepsy, together with the total destruction of the mental powers, and the impairment of the volitional movements, left no impress behind them, appreciable either to microscopical or other means of detection, to explain the formidable malady exhibited during life."

Dr. Wingett, the Medical Superintendent, subsequently discusses the occupation, amusement, and instruction of the patients, which laudable efforts continue to give a good return in augmenting the sum of health and happiness of the insane population placed under his charge. To enter into any details respecting the special means employed is unnecessary, as they appear similar to what have been mentioned in previous reports, and are, on the whole, analogous to those often employed elsewhere; while with their beneficial working the profession and public seem already generally familiar.

We had intended to allude to other public Asylums in Scotland, especially to those at Dumfries and Aberdeen, both highly deserving of notice, but this instructive occupation must be deferred until some future opportunity. The institutions of Ireland must likewise be deferred. In conclusion, however, we now would only remark that the Reports from all incontestably manifest how essentially beneficial early treatment, with proper and safe surveillance, always prove, especially in an important class of lunatics—viz., who often become either dangerous to others or to themselves, not only under ordinary circumstances, but even where carefully watched, and having the many advantages possessed by every well-regulated public institution for the insane.

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ART. I.—THE MISSION OF THE PSYCHOLOGIST:

Being the Address delivered by Dr. FORBES WINSLOW, on his taking the chair as President of the Association of Medical Officers of Asylums and Hospitals for the Insane, at the Annual Meeting, held in London, July 2nd, 1857.

GENTLEMEN,—I have the honour of occupying on this occasion the distinguished position of your President, and in that capacity it is now my privilege and pleasure to appear before you.

Addressing myself to a body of gentlemen distinguished for their ability, experience, and knowledge of the morbid phenomena of mind, as well as practical acquaintance with the treatment of the insane, I ask, is it possible for me to give you any information you are not already fully in possession of; is it in my power to impress upon your mind a higher appreciation of the noble and honourable vocation in which we are all engaged than that which I believe you have already formed? I despair of bringing before this association any novel facts in pathology or therapeutics—any startling deductions calculated to excite your interest, attract your attention, or instruct your understandings. However, I will, notwithstanding the obvious disadvantages under which I labour,—with, I trust, an unostentatious distrust in my own capacity either to inform or please—venture to address to my fellow-labourers in the great work of love and Christian philanthropy a few words in relation to the anxious, onerous, and often painful duties which devolve upon all engaged in the treatment of the insane. It is well that we should, from time to time, whilst occupied in life's pilgrimage, lean upon our staff, pause, and seriously consider the position it has pleased the will of Providence that we should occupy. It is right and befitting that we should occasionally solemnly reflect upon the PAST, dwell with earnestness upon the PRESENT, and seriously ponder over the FUTURE. In commercial phraseology, it is right that we should occasionally take stock, examine carefully our

ledger, ascertain with accuracy the balance at the banker's, and consider with business-like precision and exactitude our credit and debtor account. The process of mental retrospection cannot be otherwise than beneficial to us all. It is well that the man occupied in the higher spheres of usefulness, who is cultivating the more abstruse and philosophical departments of the science and art of medicine, that he who is entrusted by the legislature with the care and treatment of the insane, should frequently ask himself the questions—What are the functions delegated to me? Do I entertain a right appreciation of my important duties, and am I so discharging them that at the great and final day of judgment I shall be in a position to give a good and faithful account of my stewardship?

Considering our vocation in its strictly scientific relations, need I observe, when comparing it with other branches of our noble profession of which it forms a part, that the practical psychologist occupies high and honourable vantage ground.

It is not my intention to breathe a word in disparagement of other sections of the medical profession. Each class holds an honourable rank in the great circle of science; each division has allotted to it its own anxious and specific duties; and whatever position the practitioner of medicine may fill, whether it be that of a surgeon, a general or special physician, all in their separate and respective spheres of duty have responsible functions devolving upon them. But in what respect do we differ from other departments of the medical profession? what particular and specific functions are assigned to those engaged in the treatment of the insane? Whilst the physician devoted to general practice is administering to the *physical* state of the system—in healing abnormal conditions of *matter* interfering with the *vital* manifestations—we, as psychologists, take a more exalted flight into the regions of science. It is our enviable privilege to deal with the *human mind*—to study its healthy as well as disordered state, to investigate that SPIRITUAL aura, that DIVINE ESSENCE which is so mysteriously interwoven and associated with the grosser particles of the material fabric.

How noble is the study in which we are engaged! how important the duties that devolve upon us! how solemnly responsible is our position! Is it possible to exaggerate or over-estimate our character, influence, importance, and dignity! What profound and accurate knowledge of the mind in its normal state do we not require before we are fitted successfully to investigate, unravel, and treat remedially its deviations from a healthy standard! How intimate must be our acquaintance with the phenomena of thought, and with the nature and operations of the

passions ! How exact should be our notions of the instinctive and perceptive faculties before we are fully qualified to appreciate subtle, morbid, psychical conditions !

We should entertain right notions of our duty and position ; we should encourage elevated, lofty thoughts and grand conceptions of our honourable vocation ; we should impress repeatedly, earnestly, and emphatically upon our own understandings and the minds of all engaged in the same holy work the significant fact, that we are occupied in the study and treatment of a class of diseases affecting the very source, spring, and fountain of that principle which in its healthy operations alone can bring us into remote proximity to DEITY—that we have to deal with the spiritual part of man's complex nature, with that which elevates him in the scale of created excellences, and places him high on the pedestal among the great, the good, and the wise. But our solemn functions expand in interest, gravity, and importance, as we reflect that it is mind prostrated, perverted, and often crushed by disease with which we, as practical physicians, have to deal ; that we have placed under our care a class of the afflicted human family, reduced by the inscrutable decrees of Providence to the most humiliating, degrading, and helpless position to which poor human nature can fall ; that it is our duty to witness the sad wreck of great and noble minds, and the decay of exalted genius. Like the historian and antiquarian wandering with a sad heart over ground made classical and memorable in the story of great men, and in the annals of heroic deeds—surveying with painful interest the crumbling ruins of ancient temples—viewing with subdued emotion the almost extinguished remains of proud imperial cities, consecrated by the genius of men renowned in the world's history as scholars, artists, philosophers, and poets, so it is our duty to wander through the sad ruins of still greater temples than any that were in ancient days raised to the honour of an unseen DEITY. Yes, it is our distressing province to witness great and good intellects, and proud understandings, levelled to the earth and crumbled like dust in the balance, under the dire influence of disease. Survey that old man crouched in the corner, with his face buried in his hands. He is indifferent to all that is passing around him—he heeds not the voice of man nor of woman—he delights not in the carolling of birds nor in the sweet music of the rippling brooks. The gentle wind of heaven, playing its sweetest melody as it rushes through the greenwood, awakens no consciousness of nature's charms. Approach and speak to him. Address him in terms of endearment and affection—bring before him the glowing images of the past. He elevates his head, gazes listlessly and mechanically at you,

"makes no sign," and, dropping his poor head, buries it in his bosom, and sinks into his former moody state of melancholy abstraction. This man's oratory charmed the senate—the magic of his eloquence held thousands in a state of breathless admiration; his influence was commanding, his sagacity and judgment eminently acute and profound. View him as he is fallen from his high and honourable estate. Listen to the sweet and gentle voice of yonder woman, upon whose head scarcely eighteen summer suns have shed their genial warmth and influence. How merrily she dances over the greensward! How touchingly she warbles, like poor *Ophelia*, sweet snatches of song! What a pitiful spectacle of a sweet mind lying in fragments before us! Look, she has decked herself with a spring garland. Now she holds herself perfectly erect, and walks with queenly majesty. Approach her side, accost her, she exclaims, "Yes, he will come; he promised to be here; where are the guests? where's the ring? where's my wedding dress—my orange flowers?" Suddenly her mind is over-shadowed, and her face assumes an expression of deep choking and bitter anguish—she alternately sobs and laughs—is gay, sad, cheerful, and melancholy—

"Thought and affliction, passion, hell itself,
She turns to favour and to prettiness."

Speak again to her, and another change takes place in the spirit of her dream. Like her sad prototype, the sweetest creation of Shakspeare's immortal genius, she plaintively sings—

"He is dead and gone, lady,
He is dead and gone;
At his head a green grass turf,
At his heels a stone."

Her history is soon told. Deep and absorbing passion, elevated hopes, bright and fanciful dreams of the future—DEATH with all its sad trappings and solemn mockery—seared affections, a broken heart, and a disordered brain! In its sad ruin her mind retains much of its native purity, innocence, and sweetness.

It is not my object to bring before you painful, fanciful, and imaginative sketches.

The two illustrations I have cited are faithful and truthful outlines of cases that must have come under the notice of us all. How keenly cases like these tear the heartstrings asunder and call into active operation all the kindly sympathies of our nature.

Having considered thus briefly the character of our vocation and the grave responsibilities of our position, I would with great submission to the members of this association dwell shortly on the present state of that section of psychological science more immediately connected with the practical pursuits in which we

are in common engaged—viz., that of the care and treatment of the insane.

At the onset I would premise that, as a body of men engaged in a holy and sacred office, we must not close our eyes to the fact that our position is not what we have a right to expect or are entitled to claim. Our studies, beyond a doubt, are ennobling and elevating—our duties, if conscientiously discharged, excite into action the tenderest feelings of the *heart*, and the highest capacities of the *intellect*. To an intimate knowledge of the general characteristics of disease, and the sciences of pathology and therapeutics, which we possess in common with other sections of our profession, the psychological physician must unite a profound knowledge, not only of the mind, but of mind as manifesting itself in *character* and human nature, in the most enlarged acceptance of these terms. He has to battle with the intellect in a condition of aberration; he has to combat with passions in a state of morbid exaltation; he has to administer to the feelings, affections, and appetites in a deranged or perverted condition. He has, in the exhibition of his moral remedial agents, emphatically to act upon *mind* as well as upon *matter*; and if he be unqualified by natural aptitude, education, habits of thought, and careful study of the higher branches of philosophy, to perform such duties, he is obviously unfit for the post he is called upon to occupy. If such are the recognised characteristics of the psychological physician, why is he considered by the public, to a certain extent, as a man engaged in the pursuits of commerce and trade? How is it that a psychological expert, when in the witness-box, is so often snubbed and browbeaten? Why should we, when engaged in the practical execution of our duties, be viewed and estimated as persons pursuing a degrading and dishonourable calling? Why should the finger of derision and scorn be pointed at us? Why should we be singled out from the crowd, and have flung in our faces the odious, offensive, and repulsive designation of “mad doctor,” when called upon as experts to assist in the solemn administration of justice? I ask, why such a state of things should exist? why men engaged in so honourable, sacred, and dignified a pursuit should occasionally find themselves in a position so false, painful, and humiliating? In justice to ourselves, as well as to those unhappy persons confided to our care, we are bound to consider this matter with becoming seriousness. The question cannot be ignored. There must be something “rotten in the state” to justify such a sad condition of things. We do not occupy our legitimate position in public estimation, and it is our duty to ask why such should be the case? Having given this question much anxious consid-

ration and thought, I have come to the following conclusions:—According to my apprehension, there are THREE modes of accounting for our present status. In the first place, I attribute much of the existing evil to the conduct of a few narrow-minded and ignorant men, who have improperly had the care of the insane, and who have by their very questionable proceedings in a measure degraded us all to their own ignoble level. Have we been true to ourselves? Is it necessary that we should look much away from home to find the adverse causes that have been operating to our degradation and disparagement? Have we not made merchandize of the insane, considering their care and treatment more as a question of commerce than of science? Gentlemen, I am occasionally overpowered with feelings of deep humiliation and shame, when I take up the advertisement sheet of the daily newspapers, and see to what measures men will resort to bring themselves, their houses, and their asylums prominently before the public, with a view to their personal aggrandizement. Not satisfied with advertising their establishments in the glowing, fanciful, poetical, and flowery language of the auctioneer, they go a step in advance, and offer liberal per centages and bonuses to all medical men patronizing their institutions. Again, how often we see asylums and their unhappy inmates brought into the market and offered for sale like a flock of sheep to the highest bidder, in a manner calculated to destroy all public confidence and trust in the honesty, integrity, and even common respectability of those connected with similar institutions. Consider for a moment the practical effect upon the *public* mind, and by reflex action upon the position of the psychological physician, of the following advertisement, which has been the round of the medical journals:

“INSANITY.—Twenty per cent. annually on the receipts will be guaranteed to any Medical Man recommending a quiet Patient, of either sex, to a First-Class Asylum, with the highest testimonials. Address — — —.”

This is not an isolated illustration. No number of the *Times* appears without containing announcements of a similar character. Thank God! the great body of men engaged in the treatment of the insane would sooner permit themselves to be reduced to the lowest depths of poverty and distress than resort to such unprofessional means to advance their pecuniary interests in life.

If we desire to elevate ourselves in the estimation of good men, if it be our object to secure for our specialty a legitimate position in public opinion, it behoves us to enter our firm protest against disgraceful proceedings like these; to hold no converse, companionship, or communion with men who thus degrade themselves to the condition of the common trader and shopkeeper, with-

out any portion of the respectability, honesty, and worth which so commonly distinguish men engaged in the legitimate pursuits of commerce.

To remedy this great and growing evil we must in the first place put our own houses in order—

“ Our remedies oft in ourselves do lie
Which we ascribe to Heaven; the fated sky
Gives us free scope; only doth backward pull
Our slow designs, when we ourselves are dull.”

It is now my duty to consider the second cause operating to our disadvantage—viz., the effect of legislative enactments upon the character of the psychologists and the condition of the insane.

The legislature has never fully recognised or admitted the important principle that insanity is a *pathological* condition; in other words, that it is a type of diseased manifestation. This great first principle should be prominently recorded in the preamble of every parliamentary enactment relating to the treatment of the insane, and all legislation should be based upon the full and liberal recognition of the fact that *insanity, lunacy, unsoundness of mind, idiocy, imbecility*—to use the common legal phraseology—are curable states of bodily and brain disease, disordering the manifestations of the mind; and that in the organization of all institutions for the care and treatment of the insane, as well as in the distribution of licences to persons willing to undertake the management of this class of affections, the first question to be considered is, whether the party is fitted by education, knowledge, and experience for the performance of his responsible duties. I would permit no one to have the legal charge and treatment of either an acute or chronic case of mental aberration who was not a qualified medical man. As long as licences are granted to non-professional persons, as well as to women, the public will be indisposed to believe that insanity is the result of a physical morbid condition of the brain, or of some organ in close sympathy with it; or that the disease is one amenable to remedial medical treatment. The non-recognition of this important elementary principle in the past legislation on this subject of lunacy has undoubtedly had the effect, not only of encouraging in the public mind erroneous views of the nature and treatment of insanity, but of placing the psychological physician in a false commercial position. And why should such be the case? The qualified and educated medical practitioner who has an asylum for the treatment of his own patients finds himself placed in the same category with non-professional men and women, into whose hands are entrusted the legal custody and

treatment of the insane. It is obvious that this course of procedure must inevitably tend to depreciate the character of all connected with asylums, lower the psychologist in public estimation, and tend to discountenance all remedial treatment.

What has been the natural consequence of permitting non-professional persons to have the care of the insane? Persons palpably unfitted for the right and humane performance of so solemn a trust have been discovered seriously and wilfully neglecting the interest of those entrusted to their legal guardianship. The evil has been fully recognised by the State, and from time to time various legislative enactments for the protection of the insane have become part of the statute law of the land, so constructed as to meet the exigencies of the case, and, if possible, avert a recurrence of these evils. Stringent legal clauses have found their way into these various lunacy enactments, until we may be said to act under the authority of a bill of *pains and penalties*. I do not complain of the operation of these measures; I refer to the fact simply with a view of establishing my position, that owing to the character of a few of those who have in former years had the care and treatment of the insane, such stringent laws have been deemed essentially necessary for their safety and protection.

It is not my intention to consider in detail the various existing lunacy bills for the purpose of satisfying you that the provisions of the present law operate prejudicially to the interests of psychology, and are seriously detrimental to those connected with the care of the insane. I will cite but one illustration of the fact.

Agreeably to the provisions of a former enactment, no medical man was held to be legally qualified for the post of a Commissioner in Lunacy who had any interest, direct or indirect, in the confinement of the insane for *one* year previously. This clause was altered in the last Act of Parliament, the one now in operation; and in conformity with the amended bill, no medical man is statutorily eligible for the office of Commissioner in Lunacy who has had for two years an interest, direct or indirect, in the confinement of the insane; in other words, the candidate must have been disconnected with a private asylum for a period of *two* years, the legislature not considering one year a sufficient time to restore the mind of the psychological physician to a state of judicial purity!

So great is the contamination and degradation incidental to a connexion with the treatment of the insane and the management of an asylum, that the legislature in its profound wisdom and extraordinary sagacity, considers two years' purgation—two years of psychological *quarantine* necessary before the medical man

can be viewed as qualified to present a *clean bill of health*, and thereby fitted to sit at the Board of Commissioners, and assist in the administration of the law! Upon what principle was such a clause introduced into the Lunacy Bill?

I fully admit that no person appointed to so important an office should have the most remote interest, direct or indirect, in the care and treatment of the insane, and that before accepting an appointment of the kind, and prior to his taking the oaths of office, he should be in a position to say that he has entirely ceased to have the slightest or faintest shadow of interest in the confinement of any one insane individual; but it puzzles my simple understanding to comprehend why the law should require *two* years of cleansing and purification on the part of gentlemen engaged in the solemn and faithful discharge of the highest class of professional duties before they can be considered fitted for such an appointment.

I should be insulting the understanding of those I have the honour to address if I were to occupy any time in attempting to demonstrate the practically injurious effect of such a provision of the law upon the character and position of all engaged in the study of psychology, and in the care and treatment of the insane. Whatever tends to lower in public estimation the psychological physician, whether connected or unconnected with a private asylum, must materially, and without doubt, injuriously affect also those connected with our public institutions, and at the same time damage seriously the vital interests of the insane. Apart from the mischief such a state of the law must inflict upon the great body of psychological physicians, consider for one moment the serious injustice it does to a number of physicians engaged in private practice, and who, in a measure, are compelled to be interested in and associated with private asylums. These men are disfranchised, virtually excluded from the office of commissioner. Irrespectively of a man's reputation, character, and experience, he is legally disqualified if he retains any interest in the confinement of a single insane person. Destroy by legislative enactments the *social* position of the physician engaged in this branch of practice, and you immediately cripple his resources, and very much circumscribe his sphere of usefulness.

I have no hesitation in asserting that this is an unjust, a mischievous, and an iniquitous enactment. I can conceive a man of European reputation, of great practical knowledge, of unbounded experience, of profound sagacity, of high and unimpeachable honour and character, looking forward at the close of a brilliant and useful career to an appointment of this nature, as one of the prizes which should be awarded to professional men whose great public services and talents were entitled to some

slight recognition. This man would be ineligible for the office the duties of which he was admirably fitted to discharge, unless for two years he had ceased to have any interest in the confinement of the insane! Profound legislators! Wise statesmen! Eminent and sagacious senators! to have conceived so enlightened and benevolent an enactment.

In considering the third cause which has operated to the disadvantage of the psychologist I must be brief. The ignorance exhibited by the public of the real characteristics of insanity and of the treatment necessary for its cure is certainly great. Poets, dramatists, and novelists have materially aided in promulgating fictitious, imaginative, and consequently erroneous notions of insanity.

From this imputation I, of course, except our own immortal Shakspeare, that great magician whose colossal genius, profound wisdom and subtlety,—whose playful fancy, brilliant wit, extraordinary and intimate insight into the secret workings of the human mind and heart, and whose universal knowledge, shed a brilliant flood of light upon every subject to which he directed the powers of his noble and transcendent intellect. His delineations of insanity must ever be viewed as master creations—as imperishable monuments of grandeur, purity, beauty, grace, loveliness, and truth. He was pre-eminently the great and gifted psychologist of his epoch, and no man (and we have had great giants since his day) has yet been able distantly to approach him in his knowledge of healthy or morbid mental phenomena.

In conclusion, I would again repeat that we must look faithfully at our own hearts, honestly analyse our own motives, and conscientiously scrutinise our own conduct, if we desire to discover the true cause of the present unsatisfactory status of the psychological physician, and are anxious to elevate our body in the social scale.

Having said so much about ourselves, let me finally add a few words respecting those sad cases placed under our special care and protection. We cannot too frequently allow our minds to dwell upon the peculiar state of those reduced by insanity to a condition of utter and childish helplessness. In other classes of disease, in which the functions of the brain remain intact, the invalid, even while suffering the most acute and agonizing pain, bodily distress, and physical prostration, is in a state to appreciate his actual relations with those around him—he feels sensitively the exhibition of tender sympathy—he properly estimates the care and attention bestowed upon his case, and recognises the skill of his faithful medical adviser. Alas! how different are the feelings and thoughts of many of the insane! In this class of affections the kindness, sympathy, skill, unremitting

assiduity, and attention of the physician are often not outwardly or manifestly appreciated. He has, in many cases, to pursue his holy work without the exhibition of the slightest apparent consciousness, on the part of the patient, of his efforts to assuage his anguish and mitigate his condition of mental disease and bodily suffering. Nevertheless, it is our sacred duty, even where, as is occasionally the case, our actions are greatly misconstrued and perverted by those to whose relief we are administering, to unflinchingly persevere in our efforts to carry out our curative process of treatment. Our poor, unhappy invalid may believe that we are acting the part of his bitterest foe. This ought not to excite in our mind any feeling but that of the most profound love and sympathy. If his language be offensive and repulsive—if he be guilty of any acts of violence towards those in attendance upon him—let us never for a moment lose sight of the fact, that his unhappy affliction has, to a degree, destroyed his free will, and that he, for a time, has ceased to be a responsible being. It would be cruel, whilst such a condition of mind exists, to treat such a patient otherwise than as a person deprived by disease of the power of complete self-government and moral control. I feel how unnecessary it is for me to urge upon those connected with this association, as well as to all engaged in the treatment of the insane, the importance of never losing sight of the fact, that even in the worst form of mental disease there are some salient and bright spots—upon which we may act, and against which we may direct our most potent curative agents. How true it is that

“There is some soul of goodness in things evil,
Would men observingly distil it out.”

The more formidable, and apparently hopelessly incurable types of mental derangement admit, if not of cure, at least of considerable alleviation and mitigation. It is always in our power to materially add to the physical comforts of even the worst class of patients; and when a cure is impracticable, it is our duty by every means in our power to ease the passage to the tomb. Again, we should never say of a case of insanity that it is incurable, or that it baffles our skill. We undoubtedly possess the power of materially modifying (if we cannot entirely re-establish the mental equilibrium) the most unfavourable and distressing forms of insanity—rendering the violent, and turbulent, tractable and amenable to discipline—the dangerous, harmless—the noisy, quiet—the dirty, cleanly in their habits, and the melancholy, cheerful. It is possible by a careful study of the bodily and mental idiosyncrasy of each individual case, and by an unremitting attention to dietetic and hygienic regimen, as well as by a per-

severing, unflagging, and assiduous administration of physical and moral remedies for their relief, to

“Pluck from the memory a rooted sorrow;
Raze out the written troubles of the brain,
And with some sweet oblivious antidote
Cleanse the foul bosom of that perilous stuff
Which weighs upon the heart.”

The spirit of love, tender sympathy, Christian benevolence, unwearied kindness, and warm affection, should influence our every thought, look, and action, when engaged in the treatment of the sad and distressing cases entrusted to our care. We should never forget that it is the special province of the psychological physician to

*“Fetter strong madness in a silken thread,
Charm ache with air, and agony with words.”*

Oh! what a holy, honourable, and sacred occupation is that in which we all have the privilege to be engaged! The angels in heaven might well envy us the ennobling and exalted pleasures incidental to our mission of love and charity.

ART. II.—ON THE INSANITY OF EARLY LIFE.

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[Written expressly for this Journal.]

THERE have recently been published in France two theses—one upon mental affections in children;* the other upon insanity at the epoch of puberty.† It seemed necessary to inquire the limit of the age of the individuals who formed the subjects of these two essays, because until then we had believed mental alienation to be very rare in childhood. Amongst the seventeen cases observed by the authors, the youngest were fourteen years of age, and the others varied from fifteen to twenty-two. The critic might reasonably object that the designation of children was scarcely applicable to the greater part of these patients. We are aware, however, that Haslam, Greding, Frank, Burrows, Spurzheim, Friedreich, Esquirol, and Guislain have related cases of insanity amongst children of less than eleven years. We owe to Dr. Marc, physician to Louis Philippe, the very curious observation of a young girl aged eight years, who openly avowed her intention to kill her mother, father, and

* Paulmier. Paris, 1856.

† Rousseau. Paris, 1857.

grandmother. Two motives seemed to influence her in this resolution—the desire to *possess their property*, and to amuse herself with little boys and men. She was morose, taciturn, and answered very laconically to any questions addressed to her. In the country she abandoned herself early to solitary vice, without her health appearing to suffer; but on her return to the town, she began to fall away rapidly. It was some time before the cause of this emaciation was discovered: on surpfit enfin ses habitudes onaniques; elle les confessa cyniquement, en disant qu'elle regrettait de ne pouvoir y substituer le commerce des petits garçons.*

In the course of a practice of more than thirty years, we have only observed three cases of mental derangement in children. The first relates to a pretty and intelligent little girl of seven years of age. Her mother was under treatment for a mental affection, and it was observed shortly that the child became irritable and capricious, and gave way to the most violent fits of passion, during which she would break and destroy everything which came to hand. Soon afterwards she became subject to attacks of ecstasy, in the course of which her features had a seraphic expression, and her eyes remained fixed upon the sky for a great length of time; she would cry aloud with a voice vibrating with emotion, "I see the angels; they are coming to me." When the crisis was past, she was very excitable for some time, but gradually became tranquil, and could answer rationally the questions put to her.

The second case was that of a boy, aged six, extremely difficult to manage, and of an irritability which had become, during the past four months, insupportable. When he was placed under my care, he could not remain in one place, was continually mounting upon the chairs, tables, and window-seats, and rolling in the dust; he ate gluttonously and irregularly. He would listen to nothing, but got into a rage if any one wished to control him. He perpetually escaped from surveillance, and was never found again until he had accomplished some mischief. On account of his violence, which rendered some serious result not improbable, it was necessary to impose mechanical restraint upon him. When he found himself thus disabled, he became enraged, and menaced us in a manner most extraordinary for a child of that age: "As soon as I am at liberty, I will set fire to the house, and if I can find a pointed knife, I will stab you to the heart; I should rejoice to see your blood flow, and to kill you." In his father's house, he had often used similar language; and it was the fear on the part of his parents that he would at

* *Marc. De la Folie*, t. i. p. 96.

some time carry his threats into execution, that had led them to the resolution of placing him in our institution. We found it would be dangerous to keep such a patient; he therefore returned home, and we lost sight of him.

The third example of this kind was observed by us in the asylum of St. Athanasius, founded by the much-regretted Dr. Follet. When we visited this model establishment, the directing physician, M. Baume, showed us a boy of ten years of age, who, notwithstanding a defect of the right eye, had a lively, bold, intelligent aspect; he was properly developed for that age. We were informed that he had an excellent memory, and learnt his lessons very easily. He had just made his first communion, and it was hoped that this religious act would have a favourable influence upon his shocking propensities. From his earliest years he had manifested the very worst instincts; he stole everything to which he took any fancy; he was the terror of his play-fellows, whom he pinched, struck, and abused in every way; he obeyed no orders, and wandered about incessantly. His parents had never been affected with mental disturbance, and he was an only child, so that jealousy could have no share in producing these results. His instincts became more and more perverted, and as he uttered threats perpetually, would strike and try to wound, and talked continually of killing some one, his mother determined to bring him to the asylum. There he became the terror and scourge of the patients, always pinching, biting, and striking. His victims were especially the imbecile and idiots. This kind of instinct exists also amongst these classes particularly. Last year, visiting an asylum, I saw, in the section devoted to idiots, one of them, who thought he was unobserved, steal round to give a kick to one of his companions, who had in no way molested him.

When the boy was in our presence, he seemed at first a little abashed, and spoke only in monosyllables. But speaking to him with much precaution, and attributing his misdeeds to his malady, he became more communicative, and answered our questions. He avowed quietly all that he had done; he said, "I have no pleasure except in doing mischief. I should like to shed your blood. When I pushed against my mother, it was to throw her down." On different occasions he manifested a desire to stab her with a knife to kill her. It is naturally, and without anger, that he does wrong. He knows well that it is wrong, but he feels no regret; he gives a blow as another child would give a piece of bread to a beggar. He spoke to us without reserve. One would have thought that the conversation was upon the most indifferent matters; the eyes had no particular expression. He retains the remembrance of what

he supposes to be an injury, or of an unpremeditated wrong, and avenges it on the first opportunity. Religion has made the first attempt at cure; a prolonged moral treatment may second it. It will be interesting to know what will result from this innate tendency to evil, against which chastisement would assuredly be inefficacious, independent of its injustice; and which would certainly, to any enlightened mind, be a surety of nonresponsibility in the commission of any criminal act.

These three cases establish clearly the fact that mental derangements may occur in childhood; but they constitute rather perversions of instinct, of sentiment, and of the moral faculties, than well-defined types of mania or monomania. This tendency, moreover, is in relation with the psychological dispositions of this period of life. For ninety-nine years there have been received at the Salpêtrière and Bicêtre, in the department of epileptics, idiots, and imbeciles, young children, who, examined carefully, do not really belong to this division, but are liars and thieves; immodest and vicious in every form. M. Schnepf, in his thesis on *Aberrations of Sentiment* (1855), has related nine cases, among which are found children of seven years and nine years and a half.

Sundry authors, and amongst others, MM. Parchappe, Aubanel, Chore, Delasiauve, and Paulmier, have classed mania amongst those affections to which children may be liable. The cases which we have seen, characterised by great agitation, have not appeared to us to constitute true mania; and the communication made to the Medico-Psychological Society by Dr. Delasiauve refers chiefly to epileptic children, whose maniacal attacks were complicated by a kind of ecstasy. It is, however, necessary to recognise that a form of mania may exist in children. Lastly, in his Report of the Devon Asylum for 1856, Dr. Bucknill, after having divided insanity, according to the symptoms, into mania and melancholy, relates, in the first category, the case of a child, twelve years of age, who was brought to the asylum for having attempted suicide by drowning and strangulation. He was affected then with chorea. Around his neck was distinctly visible the mark produced by the cord. He cried incessantly, "I wish to die—I wish to die." He struck his head against the wall and tried to suffocate himself by pressing his fist against his throat. He bit and struck at every one who came near him. He was put in the padded room, and had baths and medicines to procure sleep. In forty-eight hours he was quieter. Three days after, the remedies having been discontinued, the symptoms returned with all their first violence, but yielded completely to hot baths, morphia, and cold affusion to the head.

The preceding observations leave no doubt as to the disorders

of mind which may affect children. As yet the subject is new, and has not generally engaged attention ; and it is easily to be understood how it happens that there is no large collection of such cases. But the subject being opened out, it is not to be doubted that shortly more extended and complete communications will furnish to education, to medicine, and to philosophy, new materials and useful data, which will rectify many errors. We may consult on this subject a very interesting essay by Dr. Bush.* The author divides the cases which he has observed into two series ; 1st, those children who present excessive irritability of the nervous system, with a general lack of mental and bodily vigour ; and 2nd, those who, with the same lack of vigour, present diminished irritability. After examining with the greatest care the causes of the physical, mental, and moral inequality of children, he shows forth the general standard of education to which all these varieties of intelligence are subjected. He shows then that before punishing idleness, inattention, obstinacy, perversity, but especially moral derelictions, as lying, theft, &c., we should most carefully examine whether these dispositions are due to education or to the defective nature of the child. Punishment, in this case, would be only an aggravation of the evil, whilst the best corrective would be modification or change of education. No doubt the custom of considering children as mere similar units of society makes a great proportion of them entirely ignorant, where it does not morally degrade them. But how few parents would be able to have private instructors ? Their assemblage in communities is the most practicable resource ; but it will never be advantageous to the country at large, until the heads of colleges and similar institutions devote themselves less to the making of money, and more to the careful consideration of the faculties of their pupils, with the view of leading each in his own peculiar vocation.

We arrive now at the second division of our subject, which treats particularly of mental alienation at the period of puberty, or rather of adolescence. Documents on this branch of inquiry are doubtless less rare, and the related facts much more numerous, but there does not exist as yet in France any good description of this phase of insanity. We are indebted nevertheless to Dr. Wigan, author of the "Duality of the Mind," for a remarkable notice on motiveless crime amongst young people.† These series of reprehensible acts belong very evidently to perversions of instincts and sentiments of which we have already spoken. Amongst the cases which the author has collected, we find

* On "Juvenile Delinquency." P. 57. Jour. 1849, P. 428.

† Journal of Psychological Medicine, &c., vol. ii. p. 497. Lond. 1849.

instances of incendiarism, poisoning, cruelty to animals and children, and even of murder. The age of these delinquents is generally sixteen to eighteen years amongst the girls, and from seventeen to twenty-one of the boys. The special characteristic of these acts is that of being uninfluenced by any motive of animosity towards the object injured.

According to the observation of Dr. Wigan, the majority of these young persons had been subject to nasal hæmorrhage, which in some cases, even in boys, appeared with the regularity of the menstrual secretion. The criminal act was generally committed after the temporary cessation of the flux. The aspect was then always heavy, stupid, and languid. In no case was there any animation of feature, nor any of the repulsive characters of vice.

On interrogation as to the motives of their conduct, they would answer almost invariably, "I do not know—I had no motive—I thought I must do it." No other answer could be obtained but this, "I was compelled to do something." As to the *something* itself, it was determined by a simple accident, the sight of the means of accomplishing it. Dr. Wigan attributes this irresistible impulse to a local and special congestion of the brain. He has observed facts of this nature in the most respectable families, in which the greatest pains had been taken, by education and example, to instil good principles into the minds of the children. To the same disposition of mind he attributes certain forms of forgetfulness of the rules of propriety and decency in society, contempt of public opinion, and rashness, which nothing could explain or justify. He relates also certain instances of bravery almost beyond precedent, which have excited to the utmost the admiration and applause of contemporaries, which were neither excited by rivalry, nor the love of glory, nor the desire of applause, nor the passion of war—but simply by this irresistible impulse to *do something*. Under this temporary constitutional impulse these young people have shown a contempt for dangers which at another time would have been incomprehensible, and which has excited in them veritable terror on reflection. Dr. Wigan's hypothesis is, that this state may result from the too slow growth of the osseous case of the brain. We do not discuss the hypothesis; we merely collate the facts, which have an important significance in relation to morals, education, and legal medicine. We may, however, remark, that the question in reference to causation is rather superficially treated; and that to be satisfactory, it would be necessary to obtain more precise information upon hereditary influences, upon the early maladies which might have modified the consti-

tution, and especially upon the kind of education. We now pass on to our own observations.

The cases observed by us are 42 in number, which, out of 1200 patients received during the same time, give a proportion of about 1 in 28. This proportion may doubtless vary with greater numbers for comparison, but there is nothing surprising in it, inasmuch as it is strictly conformable to the calculation of probabilities: of these 42 insane persons, 23 were men, 19 women; their age was from 14 to 56 years, and they are in detail as follows:—

Years of Age.	No. of Patients.	Years of Age.	No. of Patients.
14	1	23	0
15	3	24	1
16	3	25	2
17	6	26	4
18	4	30	2
19	3	36	1
20	4	40	1
21	1	45	1
22	4	56	1

We shall here make an observation which may appear superfluous—that is, that the age indicated is that of the *last entry*; and that of all these cases, there is not one whose mental derangement did not date from childhood, from puberty, or from menstruation.

The first symptoms of the appearance of mental disorder among the boys, have generally been observed about the twelfth, thirteenth, fourteenth, and fifteenth years; and those cases in which they have not manifested themselves until the seventeenth or eighteenth year, had been in their earlier age *bizarres*, singular, unequal, capricious, and the children of diseased parents. Amongst the girls, the morbid phenomena generally first appeared at the eleventh, fourteenth, fifteenth, and sixteenth years; and those in whom they did not appear until the seventeenth and eighteenth, were characterized by similar states to those just mentioned, or had difficult menstruation. If true mental alienation begins in some of them about thirteen, fourteen, or fifteen years of age, we may affirm that in the majority of cases, the phenomena first observed are of a nervous, hysterical or convulsive nature—an unequal, depressed, eccentric disposition—in short, rather the elements or precursors of insanity, than the malady itself, which generally has a period of incubation more or less prolonged.

It is natural to inquire whether the causes of adult insanity are the same as those which determine that of the young; or

if in the latter cases there may be peculiarities of organization, or special circumstances which modify the malady—the answer must be sought in the antecedents.

With the greatest care in inquiring into the causes or predisposing influences, there are twelve of the cases in which we have been unable to gather any precise information : perhaps because the parents have not attended to the early indications—a very common occurrence. There is nothing more frequent, indeed, than to be told by them, that the affection is quite recent, when the simplest questions oblige them to recognise the existence of certain signs long existing, often because they wilfully ignore any acknowledgment of hereditary influence.

There remain, then, thirty cases in which we have been able to collect precise information. Hereditary (13) and moral (5) causes have been noticed eighteen times. Independent of mental alienation, the parents were often eccentric, *bizzares*, of an excessive weakness, false in judgment ; either incapable of forming any decision, or of extreme obstinacy. More than once, the tendency to insanity has been denied ; but it has been granted that the subject was of an excessively nervous temperament, of extreme excitability, of an imagination always running into extremes ; dwelling only upon the darkest ideas, affected with fixed fancies, and strangely moved by the least accidents. The majority of children born of such parents were uneven in temper, irritable, coarse, dishonest, sad, difficult to manage, obeying no rule ; scolded, constantly punished, detested by their instructors, in whom they saw their future enemies, the abettors of their persecutions—a form of insanity now so common.

In proportion as we advance in experience, we cannot but deplore the ignorance of men, especially those who are engaged in the instruction of youth. Because they have taken high scholastic rank—because they know Greek and Latin, and have a certain faculty of divining the ordinary intellectual and moral status of their pupils, they consider themselves competent to direct their life-career. Yet there rarely passes a year in which pupils leave the public institutions of whom their masters have neither suspected the talents nor the destined renown. But this is not the question—that with which we chiefly reproach them is, that they ignore completely the physiology of man—that they have not the least knowledge of hereditary influence, and that they believe when they find a pupil idle, captious, or rebellious, that the remedy is perpetually to punish. The first thing ought to be to ascertain if the evil proceed from constitution, from education, or from hereditary causes. In this latter case all chastisement, far from correcting, will only aggravate the evil and

hasten the explosion of the disease. I have here for illustration only the embarrassment of choice.

M— —, son of an ill-judging father, who was obstinate, and incapable of directing the education of his children, was from his infancy a witness of and actor in domestic scenes which reacted only too strongly upon an excitable organization. He became sad and pre-occupied, and at twelve years of age he was heard to say he should be glad to die. At school, his melancholy and sulky temper subjected him to frequent punishments; he was expelled, placed elsewhere, again punished, and deprived of his walks. Shut up in his room, he became peevish, rude, singular in manner: at length mental alienation clearly showed itself; and with this disposition it was not surprising that he attempted suicide at sixteen years of age.

A— —, whose mother was deranged, did not lack intelligence, but had the defects of his sad heritage. Similar to the last case in treatment, the result was the same—viz., an access of mania. It was cured, but doubtless a portion of the thorn was left behind.

There is a disease of childhood which exercises evil influence upon the mind of its victims—that is, brain fever. I knew a young man, the son of intelligent and healthy parents, who by their energy and talents had obtained a high position in society. They had six children, five of whom were lively, resolute, and capable of making way in the world. The subject of my observation presented the most marked contrast to his brothers and sisters. Full of good sense, conversing with remarkable justice, he was afflicted with a torpor which nothing could shake. He passed entire days laid upon a sofa, reading everything he could get, without being able to make the least exertion to acquire useful ideas or a suitable education. He listened to advice, declaring at the same time that it was out of his power to follow it. Punished incessantly for idleness by his masters, he never complained, but equally never amended. This young man had had, when twelve months old, a brain fever, which had nearly carried him off. It cannot be doubted that this was the cause of these mental peculiarities; and yet his instructors, who had been informed of this, continually treated him as one of the wilfully bad, making no account of the melancholy physical deterioration. Place this young man in another sphere, that of criminal acts, and justice would only see the accusation and would condemn him! And these facts are frequent.

Let us now resume our examination of antecedents. Physical and moral heritage is not the only influence which has operated unfavourably upon our patients; in ten cases the character had that stamp of singularity and eccentricity which only needed

some determining agency to lead to insanity. Continued masturbation and typhoid fever have also, in six cases, seemed to cause mental alienation. In one case it was attributable to the employment of preparations of lead. In another it was the compulsory sight of the execution on the scaffold of a brother, condemned for treason, which brought on furious mania, ending, at twenty-seven years of age, in dementia.

In the female sex there is a function which even in its physiological state ébranle leur moral, et a fait dire de celles qui ont été célèbres qu'elles cessaient d'être hommes. Menstruation is in effect the great regulator of the sex, and when the function is imperfectly performed, especially if there be any hereditary or other predisposing agency, it is frequently the cause of insanity. In the nineteen cases to which we have alluded, twelve times the menstruation, either at the first occurrence, or at the critical period, has exercised a marked influence upon the development of insanity, or of the nervous and hysterical symptoms which have preceded it.

One of these cases appears to us remarkable. A young lady, æt. 15, observed the precursory signs of her first menstruation, and experienced at once the strongest tendency to suicide. Parental affection, judicious care, incessant surveillance, all were lavished upon her; but the idea continued during the flow, became less and less strong as this ceased, but only to reappear with the same intensity at the next period. Esquirol was consulted, and treated her for a year, when the morbid tendency disappeared. Thirty years elapsed without any recurrence; but at the critical period, the same idea recurred with all its pristine force. She was again taken to the private asylum—her reason was perfect upon all other points; but she could not expel the idea of death. She felt herself irresistibly impelled to kill herself—she did not wish it, and made (she said) every effort to resist the tendency, but could not. We observed the case for many months, during which the idea persisted constantly.

In three cases, one of which terminated in idiocy, onanism was the exciting cause. Lastly, the abuse of intoxicating liquors, of *absinthe*, of tobacco, and masturbation, combined to produce insanity in a young man in whose family there was no germ of the affection.

The inquiry into the causes of juvenile insanity, then, shows that it is developed under the same influences as that of adults; only the predisposition receives a fresh impulse from the phenomena of puberty and menstruation.

The *form* of alienation exhibits nothing peculiar. In our cases, seventeen times it was mania, seventeen times monomania. Three other cases were acute delirium—three stupidity

—one was *monomanie orgueilleuse*, and one general feebleness of intellect.

To enter into the symptomatology of these forty-two cases would be to repeat what is found everywhere; there are, however, some particulars which appear worthy of special mention. A merchant feels unable to work, knows that he is ill, and says of his own accord that he has one foot upon the threshold of insanity; he is afflicted at the thought, and would be cured; but he has neither the will nor the power to act.

The *folie de l'orgueil* produces occasionally singular effects. A notary's clerk, well versed in his profession, was attacked by mental alienation. He was formerly fearful, and pusillanimous—he now became bold, hardy, and enterprising—his professional capacity was transformed into an unlimited confidence in his talent and resources. He suggested and invented means of success with an astonishing animation and closeness of reasoning; until we might have been tempted to inquire where was truth and where error, had it not been for a trace of cretinism occurring in the sequel. He ultimately committed an act the audacity of which required his sequestration.

The intermittent form of mania lately described under the name of *folie à double forme*, or "circular insanity," may present so great a calm during the melancholic stage, that we have seen a young man thus affected fulfil with perfect propriety, during four years, his duties in an extensive financial establishment, where he had every day to make the most complex calculations.

Another case became melancholic, and a monstrous *polysarcia* coincided with the period of convalescence; he went out of the house perfectly well, but *double* his former size. Some months afterwards he had returned to his normal condition, and for the last two years his reason has been intact.

One of the most interesting of the cases, and one which we believe at present to be unique in science, by reason of the long period of the incubation of the malady, is that of a man of forty years of age, a distinguished military officer. At thirteen years of age, he was assailed by religious scruples which made him wretched. Six months afterwards these ideas disappeared, and were replaced by that of doing some injury to his parents; this idea occurred on touching some vessel containing verdigris. He thought that the poison adhered to his fingers, and he washed them frequently during the day. This idea persisted for twenty-seven years, often giving him no rest, but never preventing his attending to his duties. At the end of this time it became more intense; he felt that he was losing command over himself; and at length, accompanied by one of his relatives, he came to relate his sufferings to me—sufferings which neither his present companion

nor any of his friends had ever suspected. What surprised me the most was, that after three months of care, he was restored to calmness. He was able to accomplish a mission of importance, and I saw him many years afterwards in the most perfect soundness of mind.

We have likewise attended a young lady who for a long time, at the periods of menstruation, was pursued by the idea of doing some evil. She could not see a knife or a fork at table without this idea being intensified. It then seemed to her that her hands were red with blood, and she kept perpetually washing them, whilst none of the family could conjecture the motives for this exaggerated cleanliness.

Religious scruples are very common amongst young girls, and their alarmed consciences easily lead them to believe themselves eternally lost. In these cases preaching and imprudent forms of tuition may have the most disastrous consequences.

Hysterical symptoms of all kinds are very frequent as the forerunners of mental alienation; in concert with menstruation, these symptoms assume the most varied forms, and are complicated with epileptiform and cataleptic attacks; and we do not hesitate to assert that we have verified in some instances certain of the phenomena of animal magnetism. This subject, a very delicate one, is about to be entered upon by the Medico-Psychological Society; and we believe that it is quite time that capable and conscientious men should examine into the question, as to what really scientific elements can be deduced from this part of our knowledge, as yet very obscure. When men of such eminence and learning as MM. Ferrus, Cérise, Peisse, Des Etanges, and others, shall have given the result of their experience, we shall then have a good criterion as to the merits of magnetism.

Amongst the nervous symptoms of the hysteric character, we must not forget a special form of convulsive cough, which we have observed in four cases of insanity. It may persist for months, even for years after recovery; then it becomes intermittent, and disappears as it came.

When the delirious idea flickers about the mind, we generally advise the patient to repel it, and make no concession to it; this rule, however, is subject to exception. In the case of one young female patient, each time that she attempted to repel the morbid idea, of which she recognised the falsity, or to dissimulate it, in order to avoid remonstrances, she was subject to extreme agitation and spasm, to a sort of convulsive action; she rubbed her hands and thighs with extreme rapidity, and wore out her clothes without being aware of it.

Sometimes we observe in young girls very odd habits. One young lady perpetually pulled her front hair over her face; it was cut off once for the purpose of breaking her of the habit; but as

soon as it grew again she resumed it. She would also walk five steps forward and five backwards for hours together.

Apathy and indifference are sometimes carried to the extreme. Some of the patients would remain for entire days in one position, as if stupified, and would not occupy themselves in any manner, unless absolutely compelled to it. They lamented this state, but affirmed that they could not move. Others, again, would exhibit a vivacity by no means natural to them, would express themselves in terms more polished than usual, would speak on subjects not generally familiar to them—it was a veritable metamorphosis. These changes of character have been brought about frequently by typhoid fever, the influence of which in these respects has not been sufficiently indicated.

To form a prognostic sufficiently accurate upon this form of mental alienation, it would be necessary to enter upon the medical biography of each of these cases; to follow the course of the antecedents, the incubation, the relapses, the progress, the termination, and the consequences of the affection. This we shall do in some detail, leaving out such of the antecedents as have been before treated of.

In nine individuals, the disorders of mind of which the manifestation dated from puberty, had either been restrained, concealed, or showed themselves with such characters that isolation had not been necessary, nor medical advice taken. The period of incubation varied in these cases from four to twenty-seven years. This last fact is full of interest, inasmuch as the patient, during this long period was able to conceal his sufferings from the penetrating eyes of his relatives and associates. Seven times the relapse occurred at intervals of from nine to forty-one years. In two observations, where there had been an interval of thirty years in each case, the critical period was the determining cause of the relapse. In three others, it was accouchement. One of these ladies, after an interval of eleven years, has fallen ill again.

If we analyse now the progress, the consequences, and the terminations of the derangements, we find amongst the twenty-three men the following results:—

Dead in a state of dementia	.	.	.	.	.	2
Cured—Died of bronchitis	.	.	.	.	.	1
Left melancholic—lost sight of	.	.	.	.	.	3
Commencing dementia	.	.	.	.	.	1
Fallen into a state of idiocy	.	.	.	.	.	1
Commencing feebleness of intellect	.	.	.	.	.	1
Remained melancholic	.	.	.	.	.	1
Cured	.	.	.	.	.	13

This last result (viz., the thirteen cured) requires further attentive analysis.

Of these, 3 were lost sight of, and 1, an artist of great merit, died of fever many years after his cure	4
Six others had either relapses, or remained quarrelsome, unmanageable, inconstant, uncertain, and changeable—some of the 6 were drunkards and masturbators, and had, as consequences of these vices, epileptiform attacks	6
There remain satisfactorily cured	3
	<hr/>
	13

Let us now pursue the same analysis amongst the females, and see what will be the result of the examination as regards prognosis.

The nineteen females, of whom five were married, may be thus divided :—

Four left uncured, with forms of insanity of an intractable nature, or presenting phenomena of a nervous or hysterical kind. They have been lost sight of	4
Two relapsed—one after 11 years, the other after 30, presenting the same symptoms as at first	2
Six strove for many years against their delirious ideas without success; finding, on the contrary, that they ever increased in intensity. Two of these were like automatons, so apathetic were they and indifferent to everything	6
One fell into dementia	1
Six were cured—three after having had two, three, and four relapses. The others were only treated for the first attack, and have been lost sight of. All these, except one, were of a difficult, uncertain, fantastic character, excitable, and weak of judgment	6
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	19

If we have entered thus minutely into this examination, it is because it was of importance to know what data we might calculate upon in forming a prognosis of the insanity of young persons, especially those born of parents so affected, or in whose families or history there existed the elements of insanity. Far from us be the wish to extend this melancholy influence beyond its due limits, as has been done of late years by means of the theory of "pathological transformations." We have sought for mental alienation where it was, and have carefully avoided doubtful cases. What has our examination revealed to us?

Eighteen times out of forty-two, the children inherited the mental malady from their parents, or from their eccentric and *bizarre* habits. In the great majority of cases, either under the

hereditary influence, or under that of puberty or menstruation, we have recognised the principle of the elements of mental alienation. In interrogating the parents upon the characters of their children, they have almost always answered that they were sad or gay without motive; they could not fix them to work; they had not capacity; or perhaps occasionally they had brilliant talents, but could not submit to any rule. Some were apathetic, without emulation; others of a frivolity which nothing could control. Many had convulsive affections. A very long period of incubation presaged a grave malady. The eighteen cures obtained had been often preceded by relapses—left often great changes in the character, especially an inaptitude to assume and keep any defined position in society, and presented but uncertain chances of durability of cure. The consequence deducible from this summary is, that if the cure be permanent in some cases (which we are far from denying), yet mental alienation in the young is a malady of very grave import, whether by reason of the antecedents, or of the incomplete development of the organism.

We have not spoken of the treatment, because our therapeutic agents are those of all enlightened practitioners; but especially because in these cases, it is chiefly *preventive* measures to which recourse should be had. A distinguished physician who, in his treatise upon the “Degenerations of the Human Race,” has had the merit of opening a new method in our science, eminently social and anthropological, has insisted strongly upon the form of degeneration produced by mental alienation.

Eighteen years ago, in a memoir read before the Academy of Sciences, we called the attention of the learned world to the progress of insanity. This opinion, controverted for some time, is now admitted by many authorities.* All civilized States, where charity is at the height of progress, have seen their magnificent establishments scarcely opened, but crowded at once with the insane; yet without are thousands similarly affected—not dangerous—idiots and cretins, who have an equal right to admission, as they are equally the victims of the ignorance and prejudices of society. Hereditary influence! there is in reality the knot of the question—that upon which we should direct all our efforts—that which has impelled us in these researches. When we have grouped the facts related in scattered works—when we have added our statistics to the valuable labours of Dr. Lucas upon “Natural Inheritance”—when we have proved to all that insanity is transmitted fatally by the seminal germ in very large proportion—when we have exactly realized the strong bond of

* Once for all, we do not attack civilization and progress; we only mark out the events which embarrass their march.

union between this and other nervous affections, and the generative influence of these latter in producing the former, we may then, with hope of success, occupy ourselves with the social measures of hygiene necessary to be adopted to arrest this degeneration. Even now, it is ascertained that drunkenness engenders mental alienation, and creates thousands of idiots, imbeciles, and feeble-minded persons. The facts cited by Dr. Magnus Huss and M. Morel* leave no doubt on this point. M. Ferrus, in his book on Prisoners, has likewise shown that the prisons contain a considerable number of these degenerate beings, the feeble nature of whose faculties place them in the power of clever scoundrels, whose instruments they are. No session ever passes where we do not observe criminals with lowering brow, fixed, dogged look, and imbecile physiognomy, with dangerous instincts and habits, who listen unmoved to their sentence, as though it in no wise concerned them. It is not many months since one of these wretched creatures was condemned to the galleys for having murdered a child, in order to *become invisible* (!) that he might rob with impunity! When the scientific facts, of which we are now the depositaries, shall have passed from our books to the public, and make part of the public education, so far behind-hand in the practice of life, then physicians will be called in to examine such criminals, and their reports will show, in many such cases, the hereditary result of drunkenness, of imbecility, and of mental alienation.

Meantime our mission is incessantly to indicate the *preventive cure* of insanity; to oppose all our forces to the causes of degeneration; to prevent the affected from perishing, and the sound from becoming affected by contact with the unsound. Observation also shows that we may combat the degeneration of the race by crossing the breed of races. The facts illustrative of this position are as yet chiefly derived from the domestic animals. Without going out of France, and confining ourselves to two recent experiments, we may mention the race of "charmoise" sheep, and the pigs of Bologne. The former are produced by a somewhat elaborate double crossing of different breeds, by which a race is obtained double in value to that of the parents. The pigs of Bologne are derived from an extremely degraded local breed, which are crossed with Yorkshire and Leicester pigs. The *mules* thus obtained breed together, and so a very fine breed, furnishing an important article of commerce, is obtained. With regard to the objections to crossing of races, it is sufficient to say that the want of success has been chiefly due to the neglect of the most ordinary

* A summary of these will be found in our last number, "On the Degeneracy of the Race."

physiological laws ; as, for instance, in the attempt to mix our race of horses with that of the English.

However cautious we ought to be in any comparisons between men and animals, we believe that these facts should be taken into consideration. There are, moreover, experiments ready made in the human race, which throw much light on the subject.

Wherever *précise* observations have been made, the mixed races are found superior to the coloured—almost equal, sometimes superior in certain respects, to the white races themselves. In the Philippine Islands, the mixed race forms a numerous, active, brave, industrious class of people, who have already obtained many and just concessions. It is scarcely necessary to recal what were those men of colour at St. Domingo, who so cruelly expiated their alliance with the blacks.

In Brazil, thanks to its moral and intellectual force, the crossed race has in great measure overcome the prejudice of blood, and it is especially remarkable for an aptitude for cultivation of the arts far superior to that of the pure white race. In this same empire, we find an entire province entirely peopled by a breed or race, a cross between the Europeans and the indigenous inhabitants. What is the result of this marriage ? Their peculiar stamp, their chivalrous character, their bravery, and their perseverance, have been recounted by M. Quatrefages in his "*Histoire naturelle de l'Homme*."*

Marriage is, then, the great preventive of insanity. Such a subject can only be slightly hinted at in a memoir like the present ; we shall treat of it in speaking of the means necessary to be opposed to the development of alienation in general. Our observations upon the insanity of young people furnish one page of the history of mental maladies ; we trust our fellow-labourers will give them a favourable reception.

ART. III.—ON MORAL LIBERTY.

" Heaven doth with us as we with torches do,
Not light them for ourselves ; for if our virtues
Did not go forth from us, 'twere all alike
As if we had them not."—*Shakspeare*.

WHAT is usually understood by Moral Liberty ?

The brief answer is that man is a *free* agent. And when a more elaborate definition is given, it is to the effect—" that his actions result from a choice of different motives ; and that, if *sane*, whatever may be the motives which may urge or warn him against or for an intended act, that this power is in himself,

* Rev. des Deux Mondes, 1857.

so that he can freely choose without any extraneous influence. Farther, that this power of selecting between different motives he has derived from his inherited privilege of moral liberty."

It is admitted that if he were always to act rightly and obey his better principles, that he would then experience a conscious satisfaction irrespective of any ulterior reward ; but if he should submit himself to be the slave of the more selfish and animal impulses, let him

" Not lay the flattering unction to his soul "

that he can escape the certain penalty. For whether he obeys or disobeys the higher sentiments, he is still responsible for the consequences.

This definition, we apprehend, will be assented to as the reflex of the general notion of civilized man when reflecting on moral liberty based on *data* derived from a consciousness of his relative and positive duties.

But we would now ask an important question. Is moral liberty experienced in all men in an equal degree? Is this the case even when, *ceteris paribus*, their education has been similar, if not identical?

For the present we simply respond with a negative. But prior to offering proof as to the correctness of this opinion, it is essential to enter into some physiological considerations, beginning with a few brief anatomical facts.

At birth, the child is, organically, an imperfect being—that is, the general organism is immatured. The osseous system, for instance, is partially and in some cases entirely cartilaginous; the muscles want tone, and are soft and relaxed; whilst the brain, the nerves of the external senses, and the nervous-system in general, are in an immatured condition. This state of the different organs is but temporary, as provisions are made by the laws of our being for their ultimate maturity.

From the first dawning of existence, the Creator hath pre-arranged the means for this renovating process; the mother's milk is a bland, nutritious fluid, containing lime, fibrin, &c. These are the materials which furnish means for this renovating process, modified under the different circumstances; and as the process is uniform and under certain fixed and definite conditions, we designate the results as the "organic laws." We therefore premise that a knowledge of these laws is essential to comprehend the practical portion of this Essay.

It is also essential to keep in view the fact, that the brain, nerves, muscles, bones, skin, and so forth, possess the *vis plastica*, so that each system is enabled to appropriate such portion of the newly-formed blood as will ensure their respective deve-

lopment and growth. The tardiness or intensity of the power of assimilation is dependent on some original difference of constitution.

It should be also remembered, that besides this *elective* capacity of the different organs, that most of them are influenced by special stimuli, which become a cause and an effect in the organic process.

For example, *light* is a stimulus for the eye; and the tendency of this subtle agent is, to bring into activity all the organic apparatus essential to ensure unity of action in this marvellous optical instrument; and just in proportion as these different parts are affected, will be determined the quantity of the vital fluid required for their renovation. For in every part of our complex organism, great activity causes more blood to be assimilated, rendering each system more vigorous. So that with every improvement in the organic condition will be found comparative intensity of function.

Similar remarks apply to the other senses, and with their respective stimuli, *sounds*, flavours, odours, &c. With this glance at the *modus operandi* of the special growth of the organic instruments generally, we may proceed to a more important consideration, as connected with the special topic of this communication. And we may ask whether there exists any *data* to explain how far we are warranted in supposing that the instruments of the mental faculties (the cerebrum) are under the influence of the organic laws? And further, whether in such case the growth of the organs may be retarded or accelerated? That if an affirmation can be given to these questions, should we derive from this knowledge any positive advantage—particularly as furnishing some aid for elucidating our present psychological inquiry?

Before we could give any satisfactory answer, we must submit a few preliminary remarks, which we shall discuss under the following heads:

- 1st. What is the condition of the brain of a child at birth?
- 2nd. How are the mental powers strengthened and improved?
- 3rd. What are the kinds of *stimuli* which aid this development?
- 4th. Can any salutary and certain results be ensured, unless there is direct tuition under positive laws (psychological); and the special application of those laws by which all other organs of the body grow, acquire strength and intensity of function?

The condition of the brain at birth is soft, and the convolutions undefined. And this condition harmonizes with the imperfect manifestation of any mental process. Two modes of action tend to render the cerebral mass firm and matured, thus imparting a certain activity to its different organs.

The first condition is a rapid circulation of the sanguineous fluid, and equally rapid appropriation of the new material. The second results from the gradual development of the organs of the external senses, and the impressions made on them and through them to the brain; which impressions, by repetition, ultimately tend to call the perceptive powers into a state of activity.

And it is also judicious to keep in constant view the important fact, that each of the mental faculties (like the organs of the external senses) is affected by a distinct and particular stimulus. Just in the same way that the eye is stimulated by light, the nostrils by odours, the ear by sounds, the tongue by savours, and the surface of the body (touch) by the contact or impinging of any foreign substance, so also the perceptive faculties are affected differently; as, for example, the different configuration in all bodies is appreciated by *form*; that of various tints and hues, by *colour*; density, by our perceptive faculty of *weight*; and distance, by that of *size*, &c.

And just in the same way that one who is born blind could not appreciate forms and colours, so also without the organism to perceive, the mind would be incapacitated from taking cognizance of the qualities by which all material objects are individualized and distinguished. These general facts receive confirmation whenever there exists a malformation or injury of the lower portion of the anterior lobes.*

Similar remarks of the connexion between organic instruments and specific functions may be applied to the moral sentiments so far as indicating their strength or weakness, and also the laws by which they may be improved and strengthened. For instance, to stimulate the benevolent faculty, we must induce it to feel and act from a strong sense of kindness and forbearance. And the individual himself, during the period of his training, must be treated by those under whose surveillance he is, not merely with any mere wordy theory of goodness, but with that uniform and urbane manner which wins and attracts the young. And even in dispensing to the pupil all that may satisfy his natural wants, food, clothing, and other "creature comforts," he should be addressed in the mildest tones. A mere absence of harsh expressions is inefficient—there must be positively an agreeable and affectionate manner, a pleasing suavity, which forms the spiritual food for the growth of the benevolent sentiment; whilst rude and boisterous manners and rude taunting terms act like a deadly blight, and shrivel up this noble faculty.

* This is strikingly the case in what is called "Colour blindness." The defective power of appreciating or recognising particular colours is in the ratio of more or less deficiency of the organ of colour.

Similar remarks would apply with equal force to every other sentiment and feeling. If, for instance, a child evinces a cruel disposition, everything should be avoided which stimulates its action. Any sign of savagery in a parent or tutor tends only to induce a greater intensity of this power; and those who seem to delight in tearing off flies' legs may end, under a harsh and ferocious treatment in their own training, in thinking as little of destroying a human being, and feel no more compunction than in mutilating insects.

So also in the case of a child with great connate stubbornness, this being the abuse of a natural feeling implanted in the mind, but which if treated in a dogged manner, would tend to induce habitual resistance, and ultimately degenerate into stolid obstinacy.

These examples will suffice our present purpose. And yet there is another important practical fact which should be heeded by all grades of society—namely, that when we stimulate a mental power by either precept or example, *we stimulate the organization on which it depends for its manifestation.*

For the present we shall not press the subject, but simply remark, that he who recognises the absolute value of such *data* to those who educate, will admit that a knowledge of the *organic laws*, as applied to the mental faculties, is one of paramount importance, not only in training youth, but as suggestive of valuable and certain means for aiding the great object of philanthropists, the maturing a sound system of criminal legislation, which invariably should have for its object to raise the degraded portion of the community to a higher standard in the moral scale.

Yet prior to bringing forward the whole of our evidence with the view of establishing our views, and to prove that our ideas of moral liberty are based on accurately observed *data*, we deem it imperative to ask, whether any one who has studied the human mind under its diverse phases can affirm that all men are born with equal powers (intellectual and moral); and if we conclude they are not so, can we ascertain what constitutes the difference?

We answer affirmatively. And yet it is not any contradiction to state, that all mankind are similarly endowed, and that there exists but modifications in their different mental faculties. If there existed any absolute difference, then that would constitute a distinction of species.

We admit, therefore, that all mankind have similar mental powers, and our argument is merely as to the relative degrees in which they are manifested. We regard it as possible to establish such connate differences, whether we try the experiment

with a family, a district, or a country. By the examination of the members of a single family, for instance, these constituting a small community, we perceive, however contracted the circle, differences of temper, disposition, and intelligence. And these variations could be distinctly traced to some modification of their cerebral organization.*

In addition to these remarks on the special differences which may exist, so also there may be observed a great difference in the general intellectual capacity of members of the same family. One, for instance, may possess such quickness of perception, that knowledge seems in his case to be intuitive; whilst his brother, more patient and plodding, shall be regarded as a dull and stupid boy. It would, therefore, be unfair to exact from each precisely an equal amount of progress in their respective studies; and if this were attempted, it could not be realized. It would be found just as impossible, as if we desired uniform results in tempers and dispositions of persons whose affective faculties presented the most opposite extremes—as, for instance, one who always deals in hyperbole and extravagantly exaggerates; and another who never compromises the simple and unembellished truth for either effect or applause, and who never utters a harsh expression when he has been the subject of misrepresentation. Could any training render these characters exactly alike in every particular?†

These, and numerous other differences might be indicated, and which from the dawning of consciousness were manifested as individual differences, and therefore could not be referred to any specific education. We admit that it is possible to stimulate the natural powers by judicious training, so that they may unfold all their latent intensity: and that when we attend to the natural laws (which combine physiological and psychological influences), we are furnished with a power to direct, modify, and restrain any excessive development of the whole brain on its separate faculties. The obvious advantage of this knowledge will be manifest as we proceed to unfold the practical part of this Essay.

In this place we may, however, remark, that if such differences may be observed in one family, we may anticipate still greater

* One may have a capacity for languages, another for music, a third for drawing, a fourth for mechanics, a fifth for mathematics, &c.

† We select the examples observed in one family. One was kind, considerate, and forbearing; another irascible and firm; a third orderly in all things and neat in his person; whilst his brother has not the least idea of arrangement, and never manifests any symptom of annoyance if all things were in a state of confusion. One of the family is extremely generous, and the other just as covetous. Another of the same folks will scold and storm on the slightest occasion, whilst his sister, even when greatly provoked, will manifest an angelic sweetness, as if she could not help feeling sympathy for the erring or unfortunate, and so forth. How in such cases can uniformity be anticipated?

diversity on a larger scale, as in the case of the inhabitants of small or large towns.

When we have carefully investigated the *data* furnished by patient observation on all grades and conditions of the community, we shall be prepared with such incontrovertible evidence, so as to deduce the important fact that there are different degrees of moral liberty; or, in other words, that all persons are not equally responsible for their actions.

We cannot be so unphilosophical as to suppose such differences to be accidental? They must be the result of some efficient cause. In the instance of the members of one and the same family, such must be the case; for the children are born of the same parents, and they are all surrounded by similar models for imitation and example, and with similar forms of direct tuition. If then each is still individualized, what other inference will explain the enigma, if we reject that palpable evidence we have deduced, that all these varieties in *disposition*, *temper*, and intellectual capacity are simply the consequences of some modification in the cerebral organization of each member of this small community.

Reject this explanation, and then it is obvious that we must continue to regard these plain and well-defined differences as something anomalous, or actually mysterious.

However, we affirm from long practical experience, that there is an immense advantage derived from positive knowledge on this subject; and especially so, when we know the mental constitution of each individual whose mind we might wish to influence or improve. It is a vast power, whether possessed by the parent or teacher. For this information gives a practical tendency, by enabling those who have the training of children or the correcting of the vicious habits of adults, to render their theoretical views not opposed to their daily acquired experience.

Hence, these conclusions seem inevitable from these premises: 1st. That the primary difference in the temper, disposition, and the comparative intelligence of persons results as certain modifications in the organic instruments of the mental faculties. And that, therefore, it will depend on their relative weakness or strength, the degrees of moral liberty which different individuals may manifest. 2nd. That if persons of all grades of mental power are to be benefited by education, the system must be primarily based on some definite principles, in accordance with our knowledge of the organic laws. 3rd. That in these deductions there is not anything speculative. For it is now ascertained beyond any doubt, that when persons of any inferior mental capacity derive benefit from education, it is noted that

the improvement will be in proportion to the improvement more or less in the cerebral organization, which in extreme cases presents most marked differences. So much so, that casts taken of the heads of persons in a low condition of mental power, it is ascertained that when they have manifested greater capacity, if other casts are then taken of the same individuals, the two casts would not be recognised.

We are tempted to offer the following proof of the substantial accuracy of the previous statements, preferring it to others which we could submit. When the Idiot Institution was contemplated by that excellent and philanthropic gentleman, the Rev. Dr. Andrew Reed, he called on us, and we lent him a MS. copy of a work on the subject, mentioning at the same time our own experiments—saying, “Whenever there was observed any marked change in the temper, disposition, or intellectual capacity, and that these previously irresponsible persons began to give proof that they had acquired more self-control, corresponding to their improved intelligence; that whenever this was the case, there was also observed an alteration in the forms of their heads commensurate to this moral change.” The Doctor seemed to regard the statement with some scepticism. But some years after the Idiot Institution had been established, the Doctor met us in London, and after a friendly greeting, said, “He had to apologize for doubting about the head altering, for the cases in the Asylum which had positively benefited by the system, that their heads had undergone a decided alteration, being greatly improved in form.” After thanking the worthy Doctor for his candour, we affirmed that it afforded no surprise that such should be the case, as the organic laws, like all the other laws of God, were constant.

We make no apology for this digression, as it might naturally have been supposed, *à priori*, that such changes must be dependent on changes of the organization. For we could not have inferred that the immortal soul was subject to a state of idiocy or insanity, but that the organic instruments were defective or injured, those portions of the cerebrum by which the various mental faculties are manifested; and that the form of the head, in extreme cases, like that of a well-marked physiognomy, might give external indications of the comparative intelligence or stupidity; or of high and noble principles, or of sensual depravity—that these differences would be indicated so palpably, that the character of the possessor might be read with accuracy, and more or less appreciated even by those who may be unacquainted with any particular theory, but whose conclusions would be a result of intuitive perception.

A review of these general truths will warrant the inference

that free agency must be regarded as being possessed in different degrees by different individuals. And although the conditions on which this difference depends may be traced to some modification of the cerebral instruments, let no one form a wrong conclusion. This knowledge is indeed a great power, for we learn that the brain, like the muscles, may become improved in volume and in intensity of function, by systematic exercise; and that it is also a truth, equally in reference to the organs of the mind and to the instruments of motion, that parts which are neglected and inactive shrink up and are less susceptible to their respective impressions or stimuli. So that by this knowledge we are furnished with certain, rather than by mere empirical, methods to improve mankind.

And this consists in using means to excite an active condition in the weak organs, and to leave the stronger and more impulsive powers in a quiescent state. For the cerebral instruments, like the muscles, will appropriate the vital fluid in the ratio of their active exercise.

If we had merely intimated our conviction that there existed a difference in the *moral* sense (conscientiousness), and that therefore some were more answerable for their conduct than others, there would not be any demurrer; because the fact is itself admitted by every civilized state, whose laws make a distinction between crime and disease. Hence the insane and idiots are not regarded as responsible beings, for in the eye of the law they are *non compos mentis*, a decision as sage as it is just—because idiots, with their defective anterior lobes, have not sufficient intelligence to regulate their own acts, and the insane, whether from fevers, injuries of the brain, &c., having so affected the condition of the mental faculties that the power to control mere impulses is lost; so that if either commit an homicidal act it is not treated as murder, but is regarded as the result of some illusory impression, depending on an abnormal condition of brain.

But with these enlightened distinctions, legislators have seemed to be satisfied. It may be true that they have obtained much information on the condition of the criminal-minded from the writings of medical psychologists. This knowledge was available for the purpose of rendering a distinction between disease and crime; but withal there still exists in the minds of the public many discrepant and uncertain notions of the subject.

There have also been made numerous statistical tables on the proportion of criminals with or without education. But what have been the practical results? Why, humanity has still to blush at the defectiveness of criminal legislation; which, whilst it attempts to apportion the penalty for each offence, has made

little or no provision, on a scale commensurate to the exigency of the case, to provide means to stimulate the dormant powers of the *pariahs* of the community.

We may pause to inquire whether we have any *data* to explain the sources of criminal acts, and then discuss how far these evils are the necessary results of the constitution of man and the arrangements of society. And further, whether it is possible to do away with the evil, or modify in a great degree its virulence.

For our practical view of the subject, criminals may be classed thus:—

1st. Hereditary tendencies.

2nd. Ill-balanced organizations, which are easily influenced by evil associates.

3rd. Persons with naturally good or bad tendencies, suffering from poverty and neglect.

If we examine the history of persons born with criminal tendencies inherited from one or both parents, we shall find this tendency written on their brow "like the mark on Cain," and that, under the unpropitious circumstances in which they are placed, the tendency to evil is fostered even from infancy. Poor things, they ultimately prove "that it is not good for the soul to lack knowledge"—particularly a knowledge of God and their religious and moral obligations. All the teaching they have is addressed to the animal appetites, which by repetition, theoretically and practically, leaves such unfortunate beings more and more liable to sink into still greater abasement, from being less capable of resisting the temptation of morbid desires for sensual gratification. Where then is their free agency? How has society treated them? Are they not left surrounded by constantly exhaling moral malaria, which deadens all that is lovely and elevating, and leaves their better faculties in a state of hopeless torpor. We are speaking now of children, who will in their turn become the festering sore to injure the more industrious and worthy portion of the community. What otherwise can be expected? For, like their progenitors, they are instructed from their very infancy to become willing slaves of the lowest propensities. Initiated in lying and theft as soon as they can lisp, and suffering either from excess or deficiency of nourishment (both conditions acting as stimulants for animal cravings), they become confirmed criminals, acted on by the strong instinct of self-preservation.

The fear of punishment may at times deter them from an overt act of crime; but under strong temptation, even with the almost certainty of conviction, the consequences are unheeded. They lack any higher motives to restrain them, whilst the hope of impunity often renders them reckless. Under every varying

circumstance they are liable to yield to their strongest impulses, without even the slightest compunction.

But let us remember that they have been taught to do wrong, and never how to avoid it. And their evil training has impressed them that *not* to succeed is a weakness, and that the only error they should guard against is not to be detected.

If we compare such early-trained criminals with the better organized, particularly when the latter have been carefully and judiciously educated, they almost form a distinct species. The moral liberty of these degraded beings is so low that it resembles more the imperfect kind manifested by such irrational animal as the dog, than those who are

“A little lower than the angels.”

For instance, if one of the canine species steals a piece of meat, under a keen sense of hunger, and he is beaten by his master for the act, he is impressed with the fact that there is some connexion associated between the punishment and the “dainty bit,” so that the animal will, under precisely similar circumstances, bear with the pangs of hunger, from recollecting the castigation he had received, and will thus avoid the repetition of the offence. In such a case he would, so to speak, choose between the motives of either eating and being punished, or avoid the latter and abstain.*

This, we grant, is a low state of free agency. Nor would we place it in juxtaposition with the moral liberty which is alone the province of man; but we have only quoted it to strengthen our argument, and to prove how low and degraded have fallen so large a portion of the human family, who have retained, in a vast many instances, but the outward form of manhood. Even such should be treated as if their *latent* powers might be cultivated, for all are born with a conscience or moral sense; and, although in the most degraded its voice is feeble, too much so to act with a monitorial influence, yet, unless we except the worse kind of idiot, it is possible, with a system of kindness and firmness, to stimulate it into a state of activity, and impart to it sufficient strength to restrain mere unmollified selfishness.

But to realise such comparative improvement, we must take such beings from the haunts of temptation, and place them under the *surveillance* of good persons, whose example and precepts might influence them. They should also be exercised by wholesome manual labour, but not to excess. They should be lodged in clean rooms, and fed on simple food. They should also be instructed, in their leisure hours, in some practical handicraft

* This example we cite from memory, as it was enunciated by the late most excellent and highly gifted Dr. Spurzheim, and it has, in our estimation, a great importance as an element of the subject under consideration.

knowledge; and if praised for every effort they might make for self-culture, then indeed "their sorrow would be turned to joy" with their first experienced sense of self-respect, and the sympathy and approbation of the better-disposed. On the contrary, if such efforts are neglected, let it be remembered that the repletion of vicious acts tends to deaden the sensibility of the *moral* sense, and like a cicatrized wound, it may be rendered altogether callous.

We are tempted to cite a criminal case, which will confirm many of the previously-stated views, and explain some of the predisposing causes of the social evils so injurious to the stability of the community. So that, whilst we shall be forced to acknowledge the wrongs of a large and abandoned class of our fellow-creatures, we trust that it will appear obvious that there is a positive necessity to attempt to reform them. For whilst there exists a large criminal population, it is a reflection on every God-fearing philanthropist, and a "mockery and a bye-word" on our defective legislation. For it is insufficient to enact laws for inflicting "pains and penalties" for criminal offences; it is an imperative duty not to rest satisfied until preventive means are matured.

With these remarks we will submit an example. A few years since a young man, aged nineteen, was executed, with his companion in crime, for a most atrocious and cruel murder of an old woman, who resided at a toll-gate in the suburbs of the metropolis.

This criminal, whose name was K——, was proved on his trial to have been most deplorably ignorant, and thoroughly vicious in his tendencies. His father had been a hardened and most reckless burglar, and a most inveterate drunkard, and otherwise a very depraved character.

What then could be expected from the son of such a man, who had had the bad example of his progenitors from his very childhood, and had only associated with similar worthless characters. Poor fellow, his only school was the pot-house, and his teachers mere reckless criminals and blasphemers. As he grew in years, it was but natural that his propensity for crime and for animal indulgences should greatly increase. Thus he frequented daily the lowest haunts of vice, and stimulated his powers for evil with strong and potent liquors. Theft was his regular occupation, and drinking to excess and other sensual indulgences his constant and never-varying relaxations. Uninstructed either in religion or morality, he knew not God or the duties he owed to society, whilst his intellectual culture was confined to facilitating means for rendering his nightly marauding successful. What then could be expected from such training, otherwise than that

he should become a thoroughly depraved being, always craving to gratify his sensuality.

Thus much for his history. Let us examine the evidence which may in some measure explain it.

The writer has his skull. When first observed, the forehead appeared "villanously low," the anterior lobes being very shallow. When one of these lobes was measured from the spheno-temporal suture to the external anterior surface of the cranium, it did not exceed an inch in depth, whilst the base of the skull was large and broad, and the occipital region, taken from the *meatus auditorius externus*, out of all proportion; indicating on phrenological *data* a mere degraded organization, which would be confirmed by those who are acquainted with the anatomy of the skull.

And yet this head of K——'s would have been a case which in some measure would have proved the fallacy and erroneous inferences of mere "head-feelers," who, like all other charlatans, are too apt to judge by merely empirical rules, arising from defective theoretical knowledge. For, on looking at the upper part of the skull, there was a flat, table-shaped appearance of the *sinciput*. It did not appear at all like the form of head usually observed in such depraved criminals: a form which, when viewed from the mesial line of the upper part of the skull, appears shelved off on each side, resembling the gable ends of some old-fashioned houses.*

In this instance, the cranium of K——'s, if taken as a whole, would not have seemed so very bad. For many men with no better formed heads, who had received a moral and religious training, might have passed through life with comparative respectability.

Irrespective of mere empirical theories, there was a new revelation, by means of this skull, of a painful yet important kind. For when the calvarium was removed, it was a lesson it was not easy to forget.

The skull, on being sawn open, was shown to be more than an inch thick at the anterior and upper portions, whilst the base and the posterior region were so thin as to be quite diaphanous.

It must therefore be kept in view that this is not the appearance of a normal state of the cranium, particularly in a young

* Our dissent from the professional examiner of heads is this, that those who admit the accuracy of Gall and Spurzheim's theory must confess that all that could be inferred from the form of the skull and its different parts, is that there is merely indicated certain tendencies. But it would be injudicious to speak definitely of such tendencies, as much might have been done to modify them by systematic training.

and strong man ; for if the brain and all its parts are uniformly exercised, there is a parallelism of the tables of the skull, or, in other words, a uniform thickness in the substance of the bones, save and except under the temporal muscle (the squamous portion of the temporal bones) which is accounted for by the constant working and motion of the temporal muscles over these parts.

What, then, is unfolded in this instance? Why, that which should make

“ The unco gude and rigidly righteous ”

blush that such a being should exist in a religious and civilized community. And let it be impressed in burning characters on those whose duty it is to prevent such persons from being utterly abandoned, how great is their responsibility. To leave such an individual under a morally putrefactive influence until utterly depraved, and as a consequence certain to violate the laws—then to be seized, committed to prison, and brought to trial—to be condemned by offended justice, and sentenced either to be hanged or sent to a penal settlement, where every flower-spot of the soul is obliterated, must outrage all notion of brotherly love, and all our affected solicitude for our erring fellow-creatures. We say then, fearlessly, that K——’s skull is more impressive than a sermon, and demonstrates this opinion through the evidence of the “organic laws.” These have left indelible witnesses of his utter neglect and degradation. They stand as the accusers of society, which had permitted such an instance of saturated ignorance and crime to have existed, without any effort to save him (or his class) from the certain penalties inflicted on the violation of its laws. Nay, what is more, they knew not, nor cared aught for him, until he had outraged humanity and was punished.

But this state of things cannot be unheeded with impunity. The crimes committed by the K——s of society re-act on its members—for such criminals repay on them for the degradation of their position, by wreaking vengeance on some of the best and often the most innocent, which can only be regarded as a species of retributive justice for leaving them uninstructed, and for having avoided doing what might prove a painful duty, the earnest endeavour to correct their social and moral condition, and by such means save them from the inclination to, much less the commission of, crime.

Let us, however, explain how these “organic laws” may be admitted in evidence, to explain how they indicate the course of criminal abasement, and act as unmistakeable accusers of those who failed to devise means for instructing the people

We have already said, that when the whole brain is exercised

the skull presents a uniform thickness.* That when parts have a disproportionate thinness, it is a proof that the cerebral organs in that region have been unduly exercised; and that, on the contrary, if some parts have more than a relative thickness, it indicates an inactivity or want of exercise of the organs in that region—the skull being, under these conditions of the brain, but the *index* of results: for, as under the influence of the “organic laws,” the different organs of the brain assimilate new matter in the ratio of the activity manifested a neglect of any part tends to diminish its activity, and the organ degenerates in size and in intensity of function.

In the skull under consideration we have the most convincing evidence. Let us compare its appearances with what is known of his pursuits. He had never received any positive education of the higher attributes of the mind (the religious, moral, and intellectual), and it is found that the cerebral organs by which these attributes are manifested, shrank and shrivelled up, scarcely retaining any sensibility, and this loss of substance was compensated for by an osseous deposit. On the contrary, we have evidence of facts that the animal propensities were unduly stimulated, and that the posterior lobes and cerebellum had increased in bulk, and corresponding portions of the skull were, *ceteris paribus*, much thinned; in the latter localities the *inner tables and diploe* were actually removed by absorption, and the whole skull was the silent witness of a being woefully abandoned by teachers of all kinds—teachers who should have imparted to him real knowledge of human duty, and thus have saved him from crime and its consequences. But, with sorrow be it spoken, he was left to the searing and destructive influence of the lowest propensities, and sank into a premature grave, with scarcely a touch of sympathy for his miserable fate.

Let the pharisaical talk to such a culprit of human brotherhood, and of the sinfulness of vice—he may hear these words, but to him they would not impart any definite meaning. All that he actually knows is the fact, that in his own experience he has verified the Arab’s character—“his hand has been against every man, and every man’s hand against him;” and hence he has not any sensation of remorse, nor any perception of his wasted powers!

The civilized world is also cognizant of the fact that corporal punishment will not correct vicious habits. And, alas! it is also

* For the non-professional reader, we may state that the skull is said to consist of three layers or tables—viz., an outer table of dense bone, and an inner table of the same kind; but between these tables there is interposed a softer and spongy substance, called the *diploe*.

proved that capital punishment does not prevent overt acts against life and property.

We must go to the root of the evil, and if possible destroy the seeds of crime. For if they are permitted to remain in the incipient stage, time will mature them—they will fructify, and develope their fearful energy, often to the injury of the most harmless and the most worthy.

To succeed in effecting any reformation, encouragement should be given to induce the idle and worthless to take to honest labour. This should be done at a great outlay, which would after all be a thrifty investment, if it succeeded in forming industrious rather than criminal habits. And on striking a balance of the present cost for gaols, workhouses, police corps, penal settlements, and judges' salaries, there would be left a surplus in favour of this reformatory plan.

Besides, there might be instituted, in all localities, certain prizes to be given to those who could furnish evidence of having given up a career of evil, and made some improvement in mechanical or handicraft knowledge. The advantages are many—not only the desire of improving their own worldly condition, but also a certain satisfaction from the kindly approbation of their conduct by the better cultivated grades. Of course in this experiment we allude to the children of the criminal population; with their progenitors there is something else required. There is with adult criminals the absolute necessity to prevent their drunken habits; then there might be a chance to render some of them better. With sobriety, they would be more disposed to listen to advice, and be more likely to try and live by their own industry.

Judge Talfourd, at his death, bequeathed a sacred obligation to the fortunate and moral portion of the community. He feelingly and truthfully pointed out, in that brief address, the great advantage which would result by occasionally mixing with those who were degraded by their position or their conduct. He pointed out the benign influence of this giving friendly counsel to the ignorant, and to those most liable to temptation; persons whose minds are blankless, and who therefore neither appreciate the marvels of the outer world nor the sources of endless satisfaction from cultivating those spiritual perceptions which connect themselves with our duties in this life and with our eternal hopes.

In the case of the criminal K——, what was it that had been done for him, or what had been tried to save him? His nature was perverted, but it was from mere stolid ignorance. How could he be expected to appreciate the beauty of moral science, or the profound pleasure to be derived from intellectual operations, when he, poor fellow, had never been taught "the way he

should go," or else he would not have departed so fearfully from the right path.

But when every incentive to good had been destroyed by all that the animal appetites could command, he naturally became the slave of vice, and would have continued in a career of crime had not the law forcibly interposed, and demanded his life as a sacrifice for his wicked and sanguinary deeds.

Still, let the humane pause ere they attribute all blame to the criminal, whose acts were indeed but the natural consequences of his neglected condition. We then desire to see matured some plan to prevent the development of criminal tendencies, else it would be indeed a waste of time and thought to treat on such subjects. Nay, those should blush who, after contemplating the evil as it exists, with all its ultimate consequences, yet remain supine when the work of reformation has scarcely commenced. Is it not the duty of all who possess the least influence to aid in arresting the increasing tide of moral desolation—a desolation which must ultimately swamp and lay waste every thing good among the community?

Can we continue to suffer so many of our fellow-creatures, particularly the juvenile portion, to be steeped in sin, and find excuses for ourselves for not making a strenuous effort to prevent this continual outrage of the laws of God and society?

We know from the history of a vast number of cases similar to K——'s, that such beings are regularly initiated in every species of vice from their very infancy, and that the only precautionary lesson they are taught is to avoid being detected when pursuing their dishonest practices. How can there be expected any moral nausea, when it is known that their successfully-performed criminal acts are boisterously applauded by their hoary and debased teachers; and are encouraged and stimulated by their peers, under the evil influences of gin and beer!

Many criminals are actually ignorant of the laws, and consequently do not consider anything they do any positive violation of them. So that all they think of as essential to themselves is abiding by the laws of self-preservation.

And now we ask, in sober earnestness, can we consider persons so neglected and so circumstanced to be possessed of a similar degree of moral liberty as those who are placed in more auspicious conditions?

We shall next briefly discuss our second proposition—namely, The effects induced by neglect and poverty, acting on either a naturally bad or good organization.

When the better educated classes, who are possessed of ample means, reflect on the necessity they feel for change, and for various relaxations, merely to avoid the misery of *ennui*, they

should then feel great sympathy for those whose very monotonous employment induces such a jaded condition of the nervous system that they have recourse to less pure means to ensure counter-irritation. This result they fancy they obtain by sotting themselves in pot-houses, where they only stupify their intellect and brutalize their passions. Others may combine the hope of gain with amusement, as in poaching, the excitement of which is often more stimulating than strong drinks. We allude to these latter cases, in order to point out the insidiousness of crime. For there are on record many instances where men commenced with poaching, and then gradually became initiated in other species of peculation, until they ultimately became daring midnight robbers or savage burglars.

Our legislators, cognizant of these facts, have framed laws which, for all practical purposes, seem to acknowledge the principle of different degrees of moral liberty. Although there are often great discrepancies in the way in which these laws are administered, and which might actually induce a supposition, that grades of crime are regarded only as true in theory, but not *ipso facto* so in practice. For, although there is a scale of fines and different periods of imprisonment apportioned for shades and degrees of criminal guilt, yet, in the application of these various punishments there is too much left to the discretionary power of the magistrate, who, being human, is liable, according to his humour, to be too harsh or too lenient. These errors of administering the laws result from not sufficient attention being paid to the condition and motives of the various delinquents.

We recollect a most interesting case in the Derby County Gaol, which struck us at the time with a variety of topics for reflection. Among which weighty considerations, it appeared that too often the punishment is more than commensurate to the special crimes, and that often a first offence is treated too harshly, tending in such instances to pervert the ends of justice. For it is intended that punishment should correct errors, and not convert that very punishment into a means for hardening an offender, thus making him a great plague-spot on the community.

The County Prison at Derby is built on the plan of Jeremy Bentham's Panopticon, being of a circular form, with a similar shaped "court-yard;" the different offices being arranged in *radii*, the governor's residence one of them—the advantage of which is, that this functionary can at all times take a survey of the principal parts of the establishment.

Between every *radius* there were narrow spaces, with strong iron-work gates. These places were the solitary cells. In passing one of them, our party were much interested by a picturesque-looking prisoner, who was pacing up and down the narrow walk.

On requesting the governor to give the writer of this permission to speak to the prisoner, he politely declined, saying that he could not do so without an order from a visiting magistrate. Fortunately, one of our party was in the Commission of the Peace, and he having intimated his willingness to grant us this favour, the massy gate was unlocked, and as soon as we had entered the precinct, it was again fastened. From the aspect of the prisoner it was evident that he was painfully conscious of his degradation, and that he nourished already a deadly hatred against society in general, and against those in whose power he was in particular.

To comprehend our actual position, we shall attempt to give a sketch of the scene. The space of the miserable path, where we stood face to face with the prisoner, just admitted a full grown man to walk up and down; whilst the length of the promenade itself did not exceed eight feet. At its upper extremity was the solitary cell, and at the lower end stood its sole possessor.

When we first entered, the prisoner's brow was corrugated, his fists were clenched, and his whole expression marked one who was altogether desperate, and whom to irritate might endanger one's life. As we had neither motive nor interest in offending him, although he silently scowled upon us, we did not experience any sensation of fear. We spoke to him in a kindly tone, and expressed great sorrow that such a man should have his liberty abridged: for he was a fine, handsome-looking fellow, with a good head, and a rather naturally intelligent countenance. We unfolded, in a few brief sentences, our notions of the human family, and then explained the source of our sympathy, that any one should violate the laws, and forget the ties of brotherhood which bind men together for their mutual good, and for protecting each from any selfish aggression. We do not wish to repeat our homily. But suffice it to say, that gradually the muscles of his face and hands relaxed, and tears started in his eyes. He stood like one metamorphosed from the savage state to be under the influence of more humane sentiments. The change seemed marvellous. And, as he put out his hand to shake our proffered one, he said—"You, sir, have made me do what I have not done for years—shed tears, like in my boyish days; for I have for some time past only nourished feelings of hatred and revenge for the wrongs which have been inflicted on me. I never thought that any one could or would ever show me so much kindness," or words to the same effect.

We were then curious to know something of his history, as he seemed one suited to a better fate. We therefore said—"Will you tell us for what act you are deprived of your liberty?" There

was another frown passed over his fine features, but it soon passed away.

He then related his case, which was a too commonplace occurrence. He had been guilty of poaching, and had been committed to gaol for a long period; and as he was punished so severely for his first offence, he determined to be revenged. In the prison he found many hardened and adept teachers of crime, who encouraged him in his proposed intention. On his liberation he repeated the offence, and was again incarcerated.*

The effect of these repeated punishments was frightful on the mind of one who had but the rudiments of education, but who had natural powers which, had they been properly fostered, would have rendered him a benefactor rather than a tax on the community. Our experiment confirmed this latter view of the subject, and proved how much could have been done by the magistrate who punished and degraded him if that functionary had acted on the law of kindness: he would have saved an erring brother, and given another instance of the omnipotence of the *law of love*.

The Derbyshire poacher was evidently a man with naturally strong moral susceptibilities, and in his case, the appeal to them would have fostered all the elements of good in his mental constitution, whilst harshness addressed merely his animal propensities, and induced in them a fearful intensity.

We therefore contend that, to make all punishments correctional, they should aim, in the first instance, to prevent individuals from doing evil by especially working on the higher attributes of the mind: in other words, the object should be to train the *latent* better faculties. And those who have been left in ignorance, not having, therefore, any positive free agency, should be treated as children, by being prevented from doing wrong or getting into mischief, whilst they should be systematically taught what is right and what are the respective duties of all men in society. They should not be permitted, in their ignorance and depravity, to violate the laws, and thus suffer the penalty.

It is admitted in theory that all punishments, whether for children or criminals, should not have anything like vindictiveness, but should be strictly reformatory. For instance, instead of sending persons for their first offence to a prison, a reformatory school should be selected, as in it a better spirit might be awakened; but in others, as a gaol for instance, it generally proves to be a college for fostering crime.

* We forget whether or not he had been transported for his outrage against the game laws; but we well remember how he regarded his treatment as unnaturally vindictive.

We consider punishments which are almost unproductive as doubly injurious. If, for example, instead of the treadmill, and similar wearying occupations and waste of muscular power, there could be substituted some useful and profitable labour, giving, at the same time, a certain number of hours to mind-culture, then some lasting reformation might be anticipated even among adults. But to be worked merely to produce painful inconvenience to the offenders, and without any higher motives for moral respectability being enforced, and then to be locked up like savage and untameable animals, must necessarily blight every latent better sentiment, and send them to society improved in lessons of evil, and with a determination to commit more aggravated offences.

We may be told that all these evils are known and lamented, and that various remedies have been tried to alleviate the virulence of these diseases of our social system, but without producing any permanent effect; that when once criminal desires take possession of certain minds, whatever palliatives are proposed have hitherto proved to be inefficacious, for it is asserted that crimes of all kinds are epidemical. And there are those who stand stoically and contemplate these evils, "which cry aloud to heaven," and exclaim that there is no help, for this is

———— "a world of human wretchedness,
And a world of human strife,
Sorrow, and wrong, and weariness,
That began and closed with life."—*Tinsley*.

But various remedies have been proposed, and amongst them "the silent system" was deemed the one which should work wonders. It was said, that if criminals were not allowed to speak to each other, the evil-minded could not corrupt a mere temporary offender. This may be partially true, and yet is not any cure for the evil. To improve beings who are endowed with intellectual and moral perceptions, so that they may comprehend their actual responsibility for all their acts, it must be evident that negative means will prove altogether fallacious. What is actually required in all such cases is, that the mental faculties should have positive cultivation, and their normal condition attempted by a system of active and agreeable exercise of these powers; stimulating hope that brighter and calmer days will be their reward for every effort they may make for their own self-improvement.

When the "silent system" was first tried in this country, the House of Correction at Wakefield was chosen for the experiment. Being desirous of knowing all things from actual observation, we proceeded to that town, and were accompanied by the excellent and intelligent surgeon of that prison, to ascertain for ourselves the effect of the new discipline.

In the work-rooms of the men there appeared the stillness of the grave, so far as the absence of the sound of the human voice warrants the comparison. The overseers in each room were themselves criminals; but their post, as spies on the actions and conduct of their fellows, was rewarded by a remission of all manual labour, and by a more than usual allowance of a better kind of food than the ordinary dietary of the gaol.* Animal motives were the only ones addressed under this system, as they had been under every other; for these overseers were held to their rigid duty by the idleness and comfort they obtained, and by the fact that, if they allowed any of the prisoners at work to interchange a few words, the reporter of any such lax discipline on the part of an overseer would lead to this consequence—they would exchange places; the overseer would have to take the work of the informer, and the latter would assume the rank and invidious position of his predecessor.

It was something fearful to contemplate so many *automata* working without a purpose, with scowling faces and vacant minds; and when they marched in gangs to their dinner, making no other sound than the slight one produced by the motion of their bodies, with their pale and jaded faces unmoved and uninterested, it was like a procession of the dead, literally and positively chilling us.

We then visited the infirmary, in which were many degraded organizations; but in one bed near them there was a good-looking, kind-hearted youth, who seemed of a distinct species from the rest of these patients. We remarked to our benevolent companion that it was a pity such a lad should be placed amidst and associate with such contaminated companions; but the answer was, "They must not speak, so they cannot corrupt him." The offence of the youth was that he had run away from his apprenticeship.

In the female department there occurred an incident which induced us to think that one of the reforms in the treatment of criminals must be classification, and subsequent experience confirms this imperative necessity. In the work-rooms and wash-houses there were many debased-looking, low-browed, broad-headed women, with all that harshness of features and slovenly appearance which is an invariable result of a long-continued wicked course of life. As visitors, we could speak to any of these unfortunate creatures. We asked some of them a few questions; it will suffice to state the answers of one of them. She was an uncouth-looking person, and had not anything feminine in her personal appearance, whilst the coarse habiliments of the

* This remission of labour and all task-work took place even when hard labour formed part of the sentence of these overseers.

prison and cropped hair, her coarse dissipated features and husky voice could not for a moment induce us to associate her as one of the "fair sex," for drinking and low habits had impressed on her visage a most forbidding expression.

To the question, "Have you been in prison before this time?"—"Oh yes, many times."

"What number of times, do you suppose?"—"Why, this is the seventeenth, so far as I remember. I may have been more, though."

This was said without the slightest symptom of shame, but on the contrary, there was a harshness of tone and a bravado of manner which demonstrated that the speaker did not perceive her most lamentable state of degradation.

What degree of moral liberty had such a criminal? She had not any desire to control her animal propensities; she never, at least not for many years, had experienced any of those exquisite emotions which spring from the aspirations of the moral attributes. Her principal delight was in gin, beer, or rum, and in the exercise of the lowest animal functions; whilst the latter reacted on her mind, warped and almost obliterated all feminine notions of propriety, rendered her indolent and dirty, with a distaste for all active industry. We felt shocked and horrified at beholding such a being, who was oblivious of all purity of thought and every refinement of sentiment.

After taking a survey of the other wretched specimens of humanity, in which the sample described resembled the bulk, we turned away and beheld in the distance a very different sort of female prisoner. She was a very young and good-looking girl, with an excellent cerebral organization. She was standing alone and in a pensive attitude; for, though a prisoner, she must have felt herself contaminated by the degraded party we had just left. Accompanied by our friend the surgeon, we approached this isolated person, and commenced by saying, "Surely, you are not a criminal?" The poor girl burst into tears and sobbed convulsively, and it was some minutes before she could answer. She stood before us as a strongly-marked contrast to the sordid and degraded women behind us, who appeared unconscious of their low and miserable position; she, on the contrary, looked like a beautiful Magdalen, as her contrition gave her a peculiar charm, and her sense of self-abasement represented her in a most interesting point of view, inasmuch that her conscious degradation gave surety that she desired to redeem her lost position.

A few words of kindness from us restored her confidence, and enabled her to reply to our repeated question. She then told us that she was the daughter of a non-commissioned officer; that she had lost both her parents in one week from typhus fever, and that,

in consequence of this bereavement, she was left chargeable to the parish. That the functionaries had placed her, for cheapness, at the house of a low and dishonest woman; that she had never been taught to read or write, and that she never had had any knowledge of religion communicated to her; that this "foster-mother" selected by the parish authorities had instructed her in dishonest practices, often sending her with things, stolen by herself or her associates, to pledge at pawnbrokers; and that she was taken up when despatched on a similar errand, and committed because the stolen property was found in her possession. Her tears and sobs frequently interrupted her short and painful narrative, and excited our sympathy for her forlorn and unpropitious situation; for, although very illiterate, there were *latent* faculties of a superior kind which only required the fostering hand of culture to have rendered her whole being metamorphosed.

We remarked at the time that, instead of being sent to a common gaol, this poor creature, with her naturally good qualities, should have been sent to a reformatory institution, where she could have been trained to be a useful member of the community. There is nothing gratuitous or speculative in these notions; for although this young girl had been utterly neglected in secular knowledge, and scarcely knew anything of God or religion (if we except the few childish lessons she had learned from her own mother in her infancy), and with the glaring fact that she had had positive instruction addressed to her animal propensities—lying, theft, lewdness, swearing, and blasphemy—these lessons being communicated by example and precept, and yet she had not been rendered altogether callous, but her better sentiments still responded to any appeal to them. This was evinced by the scalding tears of deep contrition which welled from her heart when touched by the palpable sympathy of genuine kindness; whilst her degraded companions—degraded by their low connate organization and the abandonment of all culture—had neither a sense of shame nor any feeling of compunction.

Surely, then, we are warranted in our inference that the good-organized possess, under ordinary circumstances, more actual moral liberty than those who are naturally defective in intelligence, and suffer also from their hereditary contaminations. And it is worthy of remark that, in any attempt for the reformation of criminals, this distinction must be strictly regarded. We might rapidly improve such a mind as that of the girl mentioned above at the House of Correction; for her own innate tendencies would appreciate kindly motives to improve her, and thus she would use her own volition to aid such efforts in her favour. Whilst the class of criminals represented by the other women, her accidental associates in the same prison, would require much greater labour and

more patience in any attempt to reform them; and then their improvement would be limited, and rather partake of a negative result: that is, if such criminals could be kept in a House of Industry and induced to work for their own maintenance, and strictly forbidden intoxicating drinks, and at the same time if a little moral instruction could be given them, they might be prevented from continuing in a criminal career, but we could never hope to render them so morally elevated as to lose every vestige of their previous vicious trains of thought. We might palliate the evil in adult cases, but it is to the young that we must direct our most energetic attention.

If we make a strong effort with incipient offenders of the laws, there might be a chance of a permanent reformation; for if we commence our task before bad habits had become actually a second nature, success would reward our labour. But in those whose career of vice had seared every better principle, and rendered the *moral* sense callous, there may exist a reasonable doubt as to the sincerity of their affected improvement. When, on the contrary, there exists, as in childhood, an elastic spirit, and a capacity in their pliant faculties to take, by judicious culture, a different direction to any temporary distortion, we may calculate on realizing a certain amount of good. To render the experiment productive of such advantages, we must transplant such children to a more genial atmosphere than the noxious one of their own degraded parentage; and then we shall have the lasting satisfaction that we had raised up a number of human beings to a higher standard in the social scale, who must have inevitably, without such extraneous assistance, sunk to the lowest depths of vice. But those redeemed from vice will repay the outlay and become a blessing to themselves, and a benefit to the community which had supplied the means for effectuating this change in their condition.

But with all such efforts it would nevertheless be a Utopian scheme to expect that any system can be productive of such a reformation as to effect anything like uniformity in all cases under treatment. There was, for example, a natural and strongly marked difference between the girl and the woman in the Wakefield House of Correction. She, poor thing, was naturally well disposed until perverted by bad teachers, but who would, under better auspices, acquire perfect self-control, and an honest desire to learn and perform her relative and positive duties. But what could be expected from the one so organized that she could unblushingly proclaim her own worthlessness, and who could speak of her seventeenth incarceration for theft without the slightest attempt to palliate her conduct.

It is, therefore, in such extreme cases that we have indubitable evidence that there exists different degrees of moral liberty, so

that free agency will be experienced in the ratio of the actually inherited character, modified by the neglect of culture and by the consequences of comparative abject poverty; and when even the natural powers are good, yet stolid ignorance and extreme penury are often predisposing causes of various kinds of moral delinquency.

Thus we infer that criminal reform, to be productive of success, must be commenced in childhood; yet we should deprecate any attempt to be made for this purpose in their degraded and polluted homes, although the brutalized parents should be made to pay something towards the maintenance and education of such embryo criminals. The principle is not a new one; for if parents do not do their duty in preparing their children to be worthy citizens of the commonwealth, the State must undertake the parental function. Many reflections were forced upon us from what we observed in the different prisons we visited, which bear on our present subject, but we shall not have space to go into details. We cannot, however, resist mentioning one fact—that the whole system of the treatment of criminals is a mistaken one; as every appeal is made to the animal propensities, whether to reward or punish, if we except the religious service, which from their defective knowledge they can scarcely appreciate. For living in open violation of the moral laws, and ignorant of their positive and relative duties, the beauty of religion is veiled, and therefore mere verbal descriptions convey but imperfect conceptions, from their incapacity to associate any positive ideas of the oral expressions used in teaching them. Man is a complex being, with faculties which fit him for his earthly labours, and moral perceptions to regulate his conduct; but if all his energies are concentrated on mere sensual gratifications, then it is injudicious to appeal to the animal propensities in any correctional attempt, and this is done when they are made to feel pain and annoyance, so that no actual advantage is gained. We affect to cure a malady, and all we do only aggravates the symptoms, and our treatment is altogether empirical. For it seems to have been forgotten by those who legislate, that whatever may be the degraded state of the criminal population, that they have mental faculties which could be trained, and moral perceptions which could be addressed. And if with such beings the process is slow, the results may be somewhat cheering.

It would require too much time to bring forward a mass of evidence in confirmation of these statements, and probably there is not any necessity to go into minute details, so we shall refer the reader to what was said of the method adopted by the framers of the "silent system." It will be remembered that the criminals selected for the experiment gained for themselves

scarcely any experience to serve them when discharged from prison. They certainly learnt an additional fact—that better educated men had used their privileged positions to *bribe* them to do their duty. The bribe, although not in solid cash, yet only appealed to the animal, for it consisted in an extra allowance of food, and a state of bodily and mental inactivity.

Criminals did not certainly derive any permanent benefit from this system; they remained mentally inactive, and this supineness reacted injuriously on their bodily constitutions; and yet criminal reformation is spoken of as if it were something to be realized by a mere outlay of money. What reformation can be expected from rewards addressed to the animal? Why not make an effort to speak to man's moral nature, and to give him purer motives for his conduct. If rewards are essential, then promise him, if his conduct is good, that he shall not only have a good certificate, but shall have some honest employment procured for him. Such a plan would be productive of a twofold advantage, there would be a chance of the reformation being permanent, and an almost certainty of awakening in the mind of the reformed a sense of self-respect.

Taking the experience of the prisoners in the House of Correction at Wakefield, they must have regarded the conduct of the superintendents as mean, sly, and vindictive. For instance, it was regarded as a most aggravated form of offence if any of these unfortunate beings ventured to relieve their monotonous condition by speaking aloud in their cells at night, for they were punished for this contumacy—and the means of detection was made by the following method:—

In order to ascertain whether such offences were committed, the turnkeys wore list shoes, which allowed them to glide along the passages, not like guardian angels, but as invidious informers. For greater facility the corridors were lighted all night with gas, and woe to him who was heard to breathe out a complaint in audible language, even if it were a prayer to the throne of mercy. It was sufficient offence for these "watchers" to have heard the sound of words; for immediately they fixed the fatal proof of this audacity by putting a cross in chalk on the door of the cell. In the morning, one of the functionaries of the prison went his rounds, and on every sleeping apartment on which the fatal mark was found, the offender was brought before the governor, who, after hearing the statement of the official, sentenced the astonished delinquent to be deprived of half his breakfast.

This demand of the propounders of the system for absolute silence on the part of prisoners rendered *espionage* absolutely necessary, and should modify our verdict in judging the conduct of the officers of the gaol. Yet we cannot help deprecating the

system, as opposed alike to the laws of our humanity and to the social and gregarious instincts of our race. It was the outrage on these instincts which had a fatal influence on the minds of many; for such as those who had to suffer, it is no wonder that they endured depression of spirit from a death-like silence; and though amidst the ominous stillness they might have felt morally nauseated because

“Of time misspent and labour lost,”

it should not have been regarded as a crime when the full heart gave vent to its feelings, and men sighed out an “Oh dear!” or “God help me!” yet for this symptom of moral convalescence they had given them a half allowance of food.

It will be also to our purpose to mention, that in this “secondary” punishment the animal appetite was made to suffer craving for food. But was this treatment calculated to render an individual morally better? How then can it be expected that men shall come out of prison, after having undergone their period of punishment, better disposed and more in love with mankind? What scintillations of a desire for improvement are annihilated by what would, to the mind of such persons, be regarded as unnecessary and unnatural harshness.

Alas! we treat prisoners, not as if they had common feelings with us, but rather as mere animals, and by these proceedings defeat the ends of justice. And when we reflect on the expensiveness of the machinery to restrain and improve this *pariah* class, and the fact that after the jail-treatment they become more vicious and vindictive, we can only come to the conclusion, that all preceding attempts to reform criminals have signally failed, because legislators have not understood the mental condition of such offenders.

Criminals should be regarded as imperfect men and women. That from defective or perverted education they have not any conception of the fitness or non-fitness of certain acts. Their mental vision is defective, and they blindly follow their strong animal propensities as irresistible impulses. How then can they be expected to take a view of human duty in that clear and unmistakeable light which men do who have normal minds?

MORAL LIBERTY being derived in the latter case from the reflected rays of a cultivated intellect and moral perceptions, in such an instance, there is *true* free agency—that is, the high privilege of having the power to regulate actions. With such capacity for self-government, an individual becomes a benefactor to his species. Any one, on the contrary, with his higher mental faculties so torpid that he is the slave of his feelings, cannot comprehend what is meant by moral liberty, unless it be to do whatever he pleases. He has not an idea that it means the

power by which we choose between motives, and by which we hold the rein on selfishness. Hence the criminal-minded are deprived of absolute free agency, as they injure others and themselves, and so impede and clog the wheels of civilization as to obstruct its workings, and prevent any permanent improvement in the constitution of society.

To awaken within this unfortunate class a sense of moral liberty, we must cultivate their dormant faculties, and teach them how, by respecting themselves, they will gain the esteem of others. These results might be attended with great, very great difficulties; but if we can teach the idiot, with his almost absolute negation of intellectual capacity, we may hope by similar patience to improve the criminal or morally-stunted being. At first criminals might not have a full perception of their own necessities, but they could act on this philosophy of the Great Bard—

“ Assume a virtue, if you have it not.
The monster, Custom, is angel yet in this,
That to the use of actions fair and good
He likewise gives a frock of livery,
That aptly is put on. *Refrain but once,
And that shall lend a kind of easiness
To the next abstinence; the next more easy.*
For use can almost change the stamp of nature,
And either curb the devil, or throw him out
With wondrous potency.”

And as a matter of much observation and experience, we would also enforce the truth—that when the novitiate in criminal practices renders it necessary to inflict on him some form of punishment, that care should be taken not to destroy “the sense of shame” in him; and we surely do so when he is degraded in a public manner.

It is said, “that first impressions are often the strongest.” This is strictly so when some truth is presented so vividly, as if the voice of the Omnipotent had spoken it. The mind then instantly seizes it, and it is indelibly impressed. For whether this is applied to some moral principle or to some law of physics, it is equally tenable.

We are tempted therefore to narrate a *scene* from which we deduced many practical reflections on the treatment of a first offence.

Many years ago, when a young man, we were visiting C——, in the county of Essex, and being told that two lads were to be publicly whipped, we desired to witness what effect it would have on them, having had a presentiment that any such public degradation could only tend to debase the recipient.

And this conviction was suggested by reflecting on what would be the effect on a *sensitive* mind, and on one who had already lost all purity of thought and the desire for the approbation of

his superiors. The sequel will show that these inferences were the natural inductions of moral laws.

On the morning of this painful exhibition there were a vast number of persons congregated before the gaol "to see the sight," and, although we were amongst them, we did not anticipate anything but pain from such a spectacle.

We were told by one of the by-standers that the elder of the two delinquents was a stranger in the town; but that he had been a groom to a gentleman who resided there, and had on the present and, as it seemed, the only occasion, been guilty of dishonesty, by selling some oats and corn belonging to his master. That he was sentenced to six months' imprisonment, and to be twice publicly whipped; once at the commencement and the other at the termination of the sentence. We must make a short digression, that those who convicted this criminal knew little of human nature, when they decided that he should commence his supposed reformation with a lacerated back, and morally smarting under the infliction of the disgrace. We need not make any comment on the school of proficient criminals this comparatively innocent young man would be associated with for six months, but merely remark that at the expiration of his sentence there was to be a renewal of the laceration, and then he would be turned out without means or character, with bleeding wounds and an irritated mind, and what but a repetition of crime could be anticipated?

The other prisoner had robbed, in a most daring manner, the shop-till of an old woman; and as he had been previously convicted, he had also a similar sentence. The prisoners were in a large cart, with naked backs. The stranger had on a cap, which he pulled down very low, to shade his face, on which there was an hectic glow. The other was without any covering on his head.

The stranger lad cried very much, but the *native* boy looked impudent and full of bravado. This was particularly the case with the latter when some of his acquaintances called him by name, and urged him to show "pluck." He shook his head in a dogged manner, and then a momentary smile passed over his features, as if he felt sure of sympathy in proportion to his indifference of the expected lashings. He afterwards turned to the other culprit, seemingly to urge him to show defiance.

The cart moved slowly, though drawn by a strong horse. It proceeded from the front entrance of the town-gaol to the top of the principal street, and then back again to the starting place. The functionary who whipped them stood inside of the vehicle, and he laid on in earnest.

When the cart stopped, it was a sorry thing to see two such young lads with their backs lacerated, yet evidently without the

slightest salutary effect on their minds. On the contrary, it was obvious to every reflective observer that the whip had destroyed any *latent* sense of shame they might have had. The stranger was indeed metamorphosed. His cap was off, he was flushed, and had an expression of contempt on his lip. The native's face was brazen and savage, and his laugh was one of defiance; and one might have read in the features of both something which indexed a long list of greater acts of criminal depravity.

The stranger, we understood, could read and write, but the native lad could not do either. What reformatory influence could be expected? The very punishment damaged their moral nature, and thus prepared them for greater injury, as they now regarded society as their implacable enemy. From that hour to the present time we have deprecated public punishments for juvenile offenders, as inducing no kind of moral benefit, and only leaving a lasting tendency to brave things which is destructive to all chance of amendment.* And, acting on our own experience, we have urged on the attention of educators the erroneous principle of exposing the conduct of wilful children before strangers, as it is offensive to their self-esteem, and pains their love of approbation, and rouses merely their bad passions, but never can stimulate the moral sentiments—

“And men are but children of a larger growth.”

The stranger, for example, who was publicly whipped at C——, could have been redeemed to the path of virtue by kindness, and by an earnest private admonitory appeal to his better nature, as there existed “a still small voice;” in witness thereof recollect the bitter tears he shed of remorse or shame when first publicly exposed. Instead of such saving effort, after his first error, the constable was sent for, and he was taken before a magistrate, examined, and committed for trial. After this first searing process, he had to appear in open court, where again his misdeed was rehearsed before a larger assembly: this was the second searing process; and finally he was brought out into the street with naked back, and publicly beaten, like an animal might be who had not any moral sentiments; and this last act warped and destroyed his better nature. Further, there was betrayed by the dispenser of the laws his positive ignorance of the constitution of the mind, and of moral philosophy, otherwise he would have discriminated in the punishment awarded in the two cases referred to; for it was evident that the stranger had a keener perception of his degradation, from having more moral liberty,

* The two lads mentioned above became adepts in crime. The stranger was hanged for forgery; and, if our memory serves us, the other was transported for life.

than the native boy. As the first had had some education, which gave him greater power of self-control (free-agency), and some knowledge of his responsibility for his actions, this accounts for his being so deeply affected; whilst the perfectly ignorant and illiterate boy was so shamefully brazen-faced as not to feel the disgrace. A writer remarks—

“Until we know what we would be at, how can we come at it? Where is our Themistocles or our Lycurgus? The wisest, the best of the God-gifted of our race are scarce adequate for the achievement of penetrating the depth of human nature, dissecting the laws of its moral being, and detecting the sources and devising the agencies of its progress and perfectibility.”

After showing the inability of official experience, he continues:—

“Mere talent or knowledge, administrative skill or worldly astuteness, will light a short way on this path. We have to deal with the infinitely complicated mechanism of this wonderful spiritual microcosm—its hopes, its fears, its fancy, its sentiments, affections, appetites, and passions. It is something greater than a mere thinking machine that is required to guide and regenerate this blurred image of the Eternal.”

These statements are eloquent from their inherent truth and importance. Judges may administer the laws, but their knowledge of physiology is often as defective as that of the juries who have to decide on the guilt or innocence of those who may be under trial.

And we have often observed that their psychological information is also often defective, which has been shown in some of the articles in this journal. For instance, in that able one by its learned Editor on the case of Luigi Buranelli, in which it is clearly shown that that unfortunate foreigner was insane when he committed the act, and that he was more fitted for an asylum than to be harassed with a trial, and to suffer the last penalty of the law.

It may be difficult always to draw the line of demarcation between crime and insanity, in both of which there is defective moral liberty, yet Dr. Forbes Winslow has done this in the above cited case. This important distinction has also been attempted by our legislators, as in Lord Ellenborough's Act; in which it is laid down in extenuation of homicide, that if one man kills another under some sudden burst of passion, without any *malice prepense*, and without having had time to deliberate on his act, that it is to be regarded as manslaughter.

If, then, our views of moral liberty are admitted, we have in the case of criminals some data for their improvement. For we consider the conditions for perfect moral liberty, the acting under the *dicta* of the intellectual and moral attributes, and the rela-

tive degree must depend on the positive or comparative excellence of the natural powers, and of their more or less judicious culture.

For to ensure physical health we must obey the hygienic laws; and so also, unless we obey the physiological and psychological conditions on which the mind's sanity depends, evil must necessarily result, and as a consequence, crime is ultimately generated.

For example, there cannot be a large number of men and women of neglected education and debased habits without their becoming a festering mass, polluting the very atmosphere, until the moral health of domestic servants, shopmen, confidential clerks, &c., is more or less affected with the consequences. The remedy is education. Not merely teaching reading and writing, which are not even the rudiments of knowledge, but the mere instruments for collecting, arranging, and preserving materials for thought. We must train the moral attributes, and regulate the feelings, so that every person in the community may know how to control their actions, and this not from any fear of punishment for infringing the laws, but from a conviction that there is always a great advantage to individuals in obeying the higher motives of the mind.

In the absence of the means of positive demonstration of this important problem, we may by an inductive process draw some satisfactory inference by comparing one thing with another. It is admitted, for instance, that before there can be symmetry of body, its different parts must be trained and exercised according to fixed laws; and so it is with the mental faculties. For the greater portion of the evils which now blight the fair prospects of society spring from the abuse or the defective condition of moral liberty.

What then can be said in apology for our dooming a large portion of the community to a state of actual and deplorable ignorance, which leaves them subject to mere sensual excitements, the natural *stimuli* of crimes, and then marvel that the consequent result is that they are guilty of criminal actions. With what grace can we afterwards inflict on such beings certain penalties, when we ourselves have heartlessly deprived them of the only means of self-control? If we would bestir ourselves, and spend the money in preventing crimes by moral means that we are now forced to pay to punish the hordes of offenders who prey upon us, we may remedy the evil, but who must, by an inevitable law, without some active means of reformation, ultimately induce more certain and general ruin, by involving the very elements of society in a state of chaos, where all will be once more "without form or order," and an ominous darkness rest over the length and breadth of the community. L.

ART. IV.—PHILOSOPHICAL PROGRESS.*

MR. LEWES is an accomplished man and a brilliant writer. The charm of his style always makes a pleasing subject still more pleasing to his readers. But while we admire the great talent with which he writes, the clearness with which he expounds, and the vigour with which he argues, we are unable to keep on friendly terms with him for many consecutive pages.

Mr. Lewes is a determined unbeliever in philosophy, and points to its unprogressive character as evidence of its aiming at impossibilities. Every attempt of the giant intellects of the past to scale the heaven of ontology by heaping mountain upon mountain, has been defeated by some redoubtable Hercules mighty in the art of destruction; and so it will ever be, Mr. Lewes would say, when mortals presume to arrogate the prerogative of gods. But in an age when mortals have surpassed the divinities of the ancient world—in an age when many alleged impossibilities have been accomplished, and many wonders have become common things in less than a quarter of a century, we, with good reason, prefer regarding the circular movement which our author ascribes to philosophy as a spiral movement, forced indeed to return towards the point from which it originates, but always receding from it in some slight degree, and always tending to an apex, from which, with great force, it will eventually start in a direct line to form the science of sciences.

Now, it seems to us that philosophy has described a circular course, not because it attempts impossibilities, but because on each departure from nature it had not made its basis firm and ample by rigid induction. In consequence of this defective beginning, scepticism has invariably overthrown its conclusions; this necessitated a fresh return to nature, when a new foundation would be laid, free from the most obvious defects of the preceding one, but still faulty, and destined again to be more carefully examined and improved. The repetition of this course again and again amounts, as Mr. Lewes thinks, to the condemnation of philosophy. But had not astronomy and chemistry to describe a devious course in the wilderness of empiricism before they reached the promised land of science?

“If no attempts were made to draw a conclusion, and see what use could be made of it, till *grounds formally complete* were before us, conclusions would never be drawn. The certainties by which the chemist, the astronomer, the geologist, conducts his operations with

* The Biographical History of Philosophy, from its Origin in Greece down to the Present Day. By George Henry Lewes. Library Edition, much enlarged and thoroughly revised. London: John W. Parker and Son, West Strand. 1857.

composure and success, were once bare possibilities, which after being handed back and forward, between Induction and Deduction, turned out to be truths.”*

Is not this just what has been taking place in philosophy? Absurd and monstrous conclusions have invariably driven men back to nature, to repeat the inductive process, and their success has been commensurate with the knowledge they possessed, or gained, of the laws of inductive reasoning; deduction being sure to develop any imperfection in such knowledge.

If we regard scepticism, to use an anatomical term, as the *pylorus* that will not allow crude and indigested matter to enter the temple of science—as the disposition to admit no proposition to be true without the assent of reason—we must confess that, so far as scepticism has been satisfied, philosophy has described a linear movement. Even Mr. Lewes himself chronicles the fact that from Pyrrho to the New Academy some advance had been made, but without intending to do so, we imagine. “Ethics had become elevated to the rank of a science.”(?)† Every fresh return to the fountain-head of nature, after scepticism had destroyed the incredible systems of philosophers, was a sort of moral recoil from the offensive conclusion that absolute certainty was unattainable. Socrates and Reid, each in a remarkable manner, initiated a reactionary movement of this moral character.

From the New Academy to Hume the linear movement has been considerable. While the Pyrrhonists and the New Academy proclaimed scepticism as the final result of all inquiry, Hume only doubted the existence of noumena—phenomena were beyond the reach of his scepticism. He says: “Whoever has taken the pains to refute the cavils of this total scepticism has really disputed without an antagonist.”‡ Here, then, is some ground gained. Whether it has been so *positively* secured as is commonly believed, remains to be seen. For instance, what are we to think of Reid’s repeated attempts to convince his readers that Hume was inconsistent in being only half a sceptic. Thus in one place he says:—

“The author of ‘The Treatise of Human Nature’ appears to me to be but half a sceptic. He hath not followed his principles so far as they lead him; but after having with unparalleled intrepidity and success, combated vulgar prejudices, when he had but one blow to strike, his courage fails him, he fairly lays down his arms, and yields himself a captive to the most common of all vulgar prejudices—I mean the belief of the existence of his own impressions and ideas.”§

Sir William Hamilton is at variance with Reid on this point :

* Outlines of the Law of Thought, by W. Thompson; p. 313.

† Page 284.

‡ Human Nature, p. 250.

§ Inquiry, Hamilton’s Edition, p. 129.

"In Reid's strictures upon Hume," he says, "he confounds two opposite things. He reproaches that philosopher with inconsequence in holding to 'the belief of the existence of his own impressions and ideas.' Now if, by *the existence of impressions and ideas*, Reid meant their existence as mere phenomena of consciousness, his criticism is inept; for a disbelief of their existence, as such phenomena, would have been a suicidal act in the sceptic."*

In Note A,† Sir William Hamilton enters more fully into this distinction. There he declares himself to be a demonstrator in relation to the facts of consciousness, but in relation to the veracity of consciousness, a dogmatist. Now, Reid was a dogmatist in both respects, and he could not see what ground there was for doubting the existence of external objects, any more than the existence of consciousness and its phenomena. Referring to the fact of Hume's not calling into question the existence of impressions and ideas, he asserts:—"I am persuaded that there is no principle of his philosophy that obliged him to make this concession."‡ This is a confusion and inaccuracy, according to Hamilton. Mr. Lewes takes virtually the same view of this point, and evidently entertains a very mean opinion of Reid's penetration. Now, as far as we have been able to perceive, the common-sense philosopher has more truth on his side than his more demonstratory critic; our reason for making this assertion we shall here append.

Every perception has two elements—a subjective and an objective—the object perceived, and the apprehension of that object. Now, there is a perception which enables us to become *speculatively* assured of the trustworthiness of perceptive acts in general. The objective element of this perception is, the primariness of the veracity of consciousness—the subjective element, the apprehension of this fact. In *the order of nature* the objective element is first. In *the order of knowledge*, the subjective. That is, the veracity of consciousness exists as a fundamental fact before we can possibly be aware of it; but, on the other hand, till we become thoroughly aware of it, that is, till we acquire the perception we have just mentioned, it is not only possible, but unavoidable that reason (to which faculty we are indebted for the perception) should be undecided on this point.§

* Inquiry, Hamilton's Edition, p. 129, note.

† Hamilton's Edition of Reid's Works, p. 742.

‡ Inquiry, &c. p. 130.

§ It is necessary to be precise on this head, because there are those who will argue that reason must start from data which do not admit of being proved, being self-evident; and that consequently there is a source of truth, the veracity of which does not allow of demonstration, because all reasoning must suppose it veracious; but that is practically, and as a matter of faith. But the data from which reason draws conclusions are not necessary and universal propositions: all such propositions, as we shall show in the sequel, are inferred from elementary facts. Now the statement that the veracity of consciousness is the fundamental fact is necessary and universal, it is not immediately perceived, but is acquired by reason. Although, then, the *knowledge* that the veracity of consciousness is the fundamental

But once this knowledge is gained, reason is forced to be acquiescent for ever afterwards. For let it after this endeavour to prove the veracity of consciousness—that having been demonstrated to be the fundamental fact of consciousness—a *petitio principii* excludes any such attempt; or let it try to *disprove* it, and it finds the disproof to be impossible, for a subversion of the *principium* would be the consequence.

Now this line of argument, though bearing a strong similarity to that carried on by Reid and Stewart, differs from it in this:—Their argument was, that the veracity of consciousness being a fundamental fact, it must be accepted as a self-evident truth. Ours is, that *reason* perceives that it is a fundamental fact, and that it consequently cannot be proved or disproved. They were pure dogmatists. We endeavour to be pure demonstrators. We believe, as they did, that consciousness is equally credible in all its deliverances. But we believe, differently from them, that since reason seeks to be satisfied on this head, it ought to be supplied with its own special evidence, instead of being silenced by the taunts and vociferations of dogmatism.

Sir William Hamilton holds a position midway between these two. He holds that if we doubt the existence of consciousness and its phenomena, the doubt refutes itself; but that if we doubt the truth of the testimony of consciousness to aught beyond its own ideal existence, it does not refute itself. The principle which we have stated above, warrants us in asserting that it does. Let us enter more fully into Hamilton's reasoning on this subject.

He lays great stress on the fact that the data or deliverances of consciousness, considered simply in themselves as apprehended facts or actual manifestations, are above all scepticism:—

“For as doubt is itself only a manifestation of consciousness, it is impossible to doubt that what consciousness manifests—it does manifest, without in thus doubting, doubting that we actually doubt, that is, without the doubt contradicting and therefore annihilating itself.”*

Now, this argument leaves the vital point still open to the assaults of scepticism. Your argument is valid, the sceptic might say, but it evidently involves a principle which, if unsound, causes it to partake of all the imperfections of a vitiated source: that principle is the veracity of the faculties which afford you

fact is the primary fact *for us*—this knowledge is not obtained by means of a *primary* cognition. The veracity of consciousness does not exist *for us* as a certainty till it becomes the objective element of the perception in which it is revealed to us, and of every perception the subjective element is first in the order of knowledge, while the objective is first in the order of existence. Vide this Journal for Jan. 1857, Art. II., On the New Scottish Philosophy.

* Note A, p. 744.

your argument. Simply so far as it is a trustworthy discloser of objects can consciousness be a voucher, not only for the existence of aught distinct from itself, but even for its *own* existence. Is consciousness trustworthy?

"A mere disposition to believe, even if supposed instinctive, is no guarantee for the truth of the thing believed. If indeed the belief ever amounted to an irresistible necessity, there would then be no *use* in appealing from it, because there would be no possibility of altering it. But even then the truth of the belief would not follow; it would only follow that mankind were under a permanent necessity of believing what possibly might not be true; just as they were under a temporary necessity (quite as irresistible while it lasted) of believing that the heavens moved and the earth stood still."*

When the sceptic asks, therefore, is consciousness a faithful guarantee for the truth of all its declarations? it is no answer to his question to insist upon the impossibility of altering some of our beliefs, even when this impossibility is of an absolute, and not of an accidental nature. It is impossible to be cognizant of an object without believing in its existence; to be conscious of an object, and to believe in the existence of that object, are inseparable acts. "All consciousness is realised in the enunciation—That is there (or this is here)."[†]

"If we attend," says Reid, "to that act of our mind which we call the perception of an external object of sense, we shall find in it these three things:—*First*, some conception or notion of the object perceived; *secondly*, a strong and irresistible conviction and belief of its present existence; and, *thirdly*, that this conviction and belief are immediate, and not the effect of reasoning."[‡]

Abstract from an act of consciousness belief in the existence of its object, therefore, and you destroy it as effectually as you would destroy water by taking away its oxygen. This accounts for the impossibility of practical scepticism. Try your utmost to believe yourself non-existent—make every effort you can to believe that a tree is part of your own being, and you never can succeed, for success in such an attempt would be the annihilation of the sane mind.§ This is primitive belief, arising merely from the presentation of the object to the immediate perceptive power of the mind; that is, it does not depend on any previous act of thought, but is itself an element essential to that act of consciousness which every other supposes. Now, human thought

* Mill's System of Logic, Third Ed. vol. ii. p. 95.

† Sir William Hamilton, Note D*, p. 878.

‡ Essays on the Intellectual Powers, Hamilton's Ed. p. 258.

§ "Nature," says Hume, "by an absolute and uncontrollable necessity, has determined us to judge as well as to breathe and feel; nor can we any more forbear viewing certain objects in a stronger and fuller light upon account of their customary connexion with a present impression, than we can hinder ourselves from thinking as long as we are awake, or seeing the surrounding bodies when we turn our eyes towards them in broad sunshine."—*Human Nature*, p. 250.

is composed of many beliefs besides these, but none of them is fundamental; as *mere* beliefs or opinions, their negation is quite conceivable, because it does not involve, as in the case of our primitive beliefs, the annihilation of all consciousness. They rest on evidence, and, unless the evidence is conclusive,* it matters not how intense or persistent they be, they are all liable to be proved erroneous. From not seeing the distinction which exists between primitive belief, and belief resting on incomplete evidence, no less a writer than Mr. J. S. Mill has been led into error and confusion on this subject.

"There is no proposition of which it can be asserted that every human mind must eternally and irrevocably believe it. Many of the propositions of which this is most confidently asserted great numbers of human beings have disbelieved. The things which it has been supposed that nobody could possibly help believing, are innumerable; but no two generations would make out the same catalogue of them. One nation or age believes implicitly what to another seems incredible and inconceivable; one individual has not a vestige of a belief which another holds to be inherent in humanity. There is not one of these supposed instinctive beliefs which is really universal."†

Now, does Mr. Mill mean to maintain that there are no instinctive beliefs whatever? Scarcely. In charging the enemy he has gone too far, and exposed himself in flank and rear. Because many of the beliefs which men held to be instinctive were afterwards proved to be not universal, it does not follow that there are no beliefs co-extensive with human thought in every age of the world. Wherever a human mind exists, there exists perception, and of perception belief in the present existence of an object is an inseparable element.

But although we are so constituted that it is impossible for us to have a perception without our having, too, as one of its elements, a conviction that its object exists as it appears to us to exist, there is nevertheless something in us which desires satisfaction on this point, such as instinctive belief does not afford it; and whenever this something becomes active in a man's mind, although he is practically constrained to act and think as the sane portion of mankind, and would confess himself demented were he conscious of doing otherwise, still speculatively—in that region of the mind which judges from the comparison of propositions, that is, through evidence—he will be all in amaze, wondering if it be possible ever to discover a reason for the faith that is in him. Now this is philosophical scepticism, and is the furthest extent to which doubt can reach while the mind

* When evidence is conclusive—when a proposition is *proved*—practical scepticism is also impossible in regard to it. The only doubt then admissible is that touching the veracity of the faculties which declare that a proposition must be true when it is proved.

† Mill's System of Logic, vol. ii. &c. p. 36.

retains its sanity. It arises from reason's* having a strong desire to be possessed of its special evidence—evidence which instinctive belief does not afford it; and until this is supplied the doubt cannot be suppressed, especially when, as it was in the time of Hume, “we are necessitated by reasoning to contradict the primary instincts of nature, and to embrace a new system with regard to the evidence of our senses;” and no dogmatism, however well grounded and however ably and forcibly expressed, suffices to quiet reason's restless longings. To call such a spirit of inquiry metaphysical lunacy, as Reid did, evinces that he had confounded a possible doubt with an impossible—the doubt of reason in search of its proper evidence with the withdrawal of that fundamental belief which inseparably accompanies an immediate, and indeed a mediate perception, which is an impossibility—an impossibility which proves that all the ridiculous actions attributed to Pyrrho were fabrications of an opponent who was illogical in his conclusions. A man is not impelled to commit all sorts of ridiculous actions, because *speculatively* he cannot satisfy his mind concerning the integrity of consciousness, and does not choose to live *in this respect* a life of faith—except it be provisionally.

But while speculative doubt does not involve practical doubt, it is quite as possible to be sceptical in regard to the *facts* of consciousness as it is to be regarding the truthfulness of its testimony; for the argument which Sir William Hamilton, and according to him, Cousin, look upon as placing the phenomena of consciousness high above the reach of scepticism, can only be regarded as decisive, so far forth as the faculties from which it proceeds are trustworthy. As long therefore as the principle of veracity receives nought but dogmatic support, so long will it be legitimate for the restless reason of man to ask—Do my faculties deceive me, or do they not? Since, then, the principle of veracity underlies even the existence of consciousness itself, it is manifest that the phenomena of consciousness are not a whit less open to question than the truthfulness of the same when it attests the existence of external objects. If Reid erred, therefore, in making no distinction between speculative and practical doubt, he nevertheless saw more clearly than his critic seems to have done, that both the facts and the testimony of consciousness involved, in an equal degree, the principle of veracity; that if the one were doubted, so ought the other; but that if the one were taken on trust, so ought the other. Thus in his strictures on Descartes, he asks why that philosopher did not prove

* We believe that we are amply justified in rejecting the distinction that has been made since Reid's time between reason and reasoning. Reasoning we consider to be the operation of the faculty of reason.

the existence of his thought. "Consciousness, it may be said, vouches that. But who is voucher for consciousness? Can any man prove that his consciousness may not deceive him?"* And again, when criticising Hume, he asks,—

"What is there in impressions and ideas so formidable, that this all conquering philosophy, after triumphing over every other existence, should pay homage to them? Besides, the concession is dangerous; for belief is of such a nature that, if you leave any root, it will spread, &c. A thorough and consistent sceptic will never, therefore, yield this point; and while he holds it, you can never oblige him to yield anything else. To such a sceptic I have nothing to say; but of the semi-sceptics I should beg to know, why they believe the existence of their impressions and ideas. The true reason I take to be, because they cannot help it; and the same reason will lead them to believe many other things."†

Reid, then, had more than an obscure view of the principle of veracity; he saw it clearly as a dogmatist, but would not see it, nor permit any one else to see it, in any other way. He assayed to erect dogmatism into a final instead of a provisional system, which is an insult to reason.

We believe that Sir William Hamilton is wrong, then, in his estimate of the difference between rational and irrational scepticism, and in his criticism on Reid's mistake in this respect; and also when he thinks that the facts of consciousness are radically less open to question than the testimony of the same, seeing that the principle of veracity underlies both, seeing that in this case we have no stronger evidence for the existence of the traveller than that he declares positively, and to the satisfaction of reason, that he does *exist*, which is the same evidence that we have for the truth of what he *narrates*.

The tenor of our remarks is, that scepticism has yet a reserve to bring up against its elated opponents, and an invincible one. But we are not sceptics without also being dogmatists, and we are neither one nor the other by choice; what we aim at is demonstration; we desire to satisfy the legitimate demands of reason.‡ As sceptics, we think sensationalism has yet to re-examine its foundation; as dogmatists, we think that most of the

* Inquiry, &c. p. 100.

† Ibid. p. 130.

‡ When these are satisfied, and not before, we shall be in possession of the long and passionately desired Criterium of Truth. It is reason alone that asks for this Criterium, and when reason has obtained it, we may rest assured there will no such absurd question be repeated as that which Mr. Lewes puts in the mouth of the ancient Sceptics:—"Very well," reply the Sceptics; "Reason is your Criterium. But what proof have you that this Criterium itself distinguishes truly? You must not return to sense, that has been already given up, you must rely upon reason; and we ask you what proof have you that your reason never errs?—what proof have you that it is *ever* correct? A Criterium is wanted for your Criterium; and so on *ad infinitum*." (p. 227.) The obvious answer to this objection is, that when reason is supplied with its special evidence it is convinced, and becomes acquiescent. To ask for proof that reason, when supplied with proof of the veracity of consciousness, decides truly, is to suppose reason behind reason, of which we have no evidence.

mighty and all-absorbing questions of all the past are yet in the womb of dogmatism, which is the real pioneer of intellectual and moral progress, and at the same time the great conservative power that has upheld many a dominant principle which sensationalism attempted to refute and condemn, and that such questions demand for their solution a more advanced method than the "positive,"—than that which has no place for universals, and pronounces essences and causes to be unknowable and problematical entities.

Having now characterized what seems to us the real state of philosophy at the present moment, we are able to point out more clearly than we otherwise should have been, the position which Mr. Lewes and the school he represents hold among the different systems which are in repute.

Sensationalism, for we must so term a system which has no recognised place for the superior faculties, is, as to phenomena, demonstratory: as to the disclosures of consciousness touching aught beyond the limits of the *ego*—sceptical. Now, in this its sceptical phase, it manifests a spirit of finality very unwise, and a contractedness certainly pernicious. Scepticism, to be of any value, must be negative demonstration. Prove that essences and causes cannot be known, that universals are unattainable, and we bow at once to such a decision. You think you *do* prove all this, but what is it you ground your conclusions upon? The circular movement of philosophy; the impossibility of sensations existing out of sentient beings—the impossibility of obtaining ideas from any other sources than sensation and reflection. Now, as to the first objection, it amounts to the fallacy of limiting what *will* be to what *has* been, and would not, we believe, have been urged had it not been deducible from the supposed impossibility of philosophy. As to the second, no one ever dreams that a sensation can have any existence out of a sentient being, but consciousness declares that certain of the objects which it apprehends are not sensations. For instance, the primary qualities of bodies are as different from feeling of any kind as it is possible to conceive anything to be. Indeed light and sound are not feelings, otherwise they could not be apprehended *as* distant objects. The very perfection of the organs of sight and hearing is that they cause us to be aware of the existence of distant objects by means of manifestations apprehended *as out of* our organism, and in the case of sight *as* possessing a degree of extension vastly exceeding that of the whole organic unity. How, then, can we regard visible objects as feelings, or affections of the organism as animated, when to be apprehended *as external* to that organism,* and as extended over a surface vastly greater

* The mere visible object, *c. g.*, considered aloof from the inferences connected with it, is apprehended *as out of* the organism. That which in the case of sight is first in the order of knowledge is cognised *as external*, and if it were not, if it were

than its own is felt to be, is contrary to all we know of feeling? We consider, therefore, that consciousness reveals three main classes of objects.

1st. Internal objects, modifications of self as animated.

2nd. Internal objects, not felt, but apprehended *as external*, and only inferred to be internal from comparing together the primary data of such objects.

3rd. External objects, apprehended as external, and which, when their primary data are compared, cannot be inferred to be aught else; and to deny the externality of which amounts to a denial of the veracity of consciousness.

Here then is one class of objects which we cannot bring ourselves, either by effort or by argument, to regard as sensations, modifications of consciousness, or anything of that kind. That when we cognise tangible qualities we are also conscious of a sensation in the nerves of touch we freely confess, but this most assuredly is not all that we are conscious of;* the sensation is accompanied with an object which is not a sensation—not a modification of the feeling, or of the thinking subject; so consciousness declares. And since consciousness knows itself, it knows that the object is not a part of itself; and since it knows all manifestations of feeling, *per se*, it knows that the object is not like them, and consequently pronounces it (from a knowledge of it, *per se*, and from a knowledge of all internal objects, *per se*) to be a *non ego*.

Now, to deny that consciousness is veracious in this deliverance involves us in inextricable confusion. We imply thereby that it cannot discriminate its objects accurately, that it pronounces some of them to be out of us when they are really within us; and if it cannot distinguish between object and object, it may not be capable of distinguishing between itself and its objects; so that reason becomes tossed to and fro upon a stormy sea of doubt without chart and compass. Now, out of this confusion the only way to escape is to become dogmatists, and believe “that we are (not) created capable of intelligence, in order to be made the victims of delusion;” “that God is (not) a deceiver;” “and the root of our nature (not) a lie;” or if dissatisfied with mere belief on this point, we must endeavour to procure such evidence as will convince reason that consciousness is not mendacious.

cognised as a feeling, how could we regard it *as out* of the *ego* by means of an association or an inference? A feeling *out* of the sentient unity! It is a contradiction in terms. Is it supposed that colour is literally a sensation, like pain, in the eyeball, and that we associate an external object with it? In that case it would be impossible for us to cognise a visual object *as* occupying the same place as that object considered as tangible, which we clearly do.

* Indeed this sensation is rarely attended to, attention being fixed upon the object, not upon the sensation.

As to the third head, the impossibility of obtaining propositions rigidly universal, because experience is finite, we must beg the reader to wait till we get further on.

Now, although we condemn the sensationalists for their contracted and unbelieving spirit, our opposition to them is not of an *a priori*, but an *a posteriori* nature; starting from the same point, and following the same direction, we believe that the road does not close where they so loudly protest that it does. That the sensational method is the true one, so far as it goes, let the grand and rapid march of the physical sciences proclaim. But the time has evidently arrived when the extension of that method, so as to gain the adherence of more idealistic thinkers has become a great social necessity. The philosophical dogmatists, no less than those who have hit upon processes of investigation without perceiving them to be laws demanding to be expressed in general terms, have undoubtedly prepared material, which it now becomes the duty of the demonstrators to test and define, in order to make the true method adequate to the moral and social requirements of this, in these respects, doubting and unsettled age. And it is only by taking possession of the material thus waiting for their appropriation that they can accomplish so desirable an end.

Now the course for the demonstrators to follow is to abstain from the suicidal act of doubting the truth of the testimony, while they hold the facts of consciousness, by which they lay themselves open to defeat from scepticism; and to satisfy the legitimate demands of reason as to the truthfulness of our faculties, in order to do which we must have recourse to that operation of the mind which infers that certain truths must be universal. Now, such a power is denied the mind by the sensationalists; they incapacitate themselves, therefore, for securing their ground against scepticism. To the task of describing how we perceive that certain propositions must be universal, we now address ourselves.

Mr. J. S. Mill defines reasoning, in the fullest sense, to be inference from particulars to particulars. "All inference," he writes, "is from particulars to particulars. General propositions are merely registers of such inferences already made, and short formulæ for making more."* But how can we conclude from particulars to particulars with absolute certainty? That all rigid deduction is from universals we cannot for a moment doubt. The *dictum de omni et nullo* we consider to be as firmly grounded as it is possible for a principle to be. How can you know that your particular applies to every case that you may have occasion to bring under it? You cannot; for then it

* System of Logic, &c. vol. i. p. 216.

would be no longer a particular, but a universal, a proposition that did not admit of an exception ; and until you know that it applies to every possible case, you can only draw probable conclusions from it. This truth will become so evident, we trust, as we proceed, that it becomes unnecessary in this place to dwell any longer upon it ; let us proceed, then.

If we observe but a single fact we cannot know that another is connected with it, except it be connected with it in the mind. It is by means of a mental *nexus*, therefore, that we know that one thing is connected with another when only one of them is observed. And now this *nexus* must be either a universal, or a particular proposition ; or a proposition the quantity of which is indeterminated. If it be the first, we infer without hesitation, that the unobserved fact is connected with the observed ; if it be the second, we infer that it may or may not be ; if it be the third, we infer that the unobserved fact is connected with the observed, but whether necessarily or contingently we cannot tell. As far as experience extends, one fact may be invariably joined to another, as that the feet of all horned animals are cloven, and we may deduce from such a proposition, and perhaps never find ourselves wrong ; but evidently uniform experience—*inductio per enumerationem simplicem*—does not enable us to decide whether the conjunction between two facts be necessary, or whether contingent merely, but uniform, as when two distinct phenomena are invariably found together, but are both effects of some known cause or joint causes. Thus there is an invariable connexion between the angles of a triangle, but no one angle is the cause of another angle.

Again, two facts being observed joined together, we have but an *indefinite* notion of the nature of the junction which exists between them, unless it happen that we *know* the nature of it previously. This previous knowledge is the mental *nexus* by means of which we determine the nature of the junction which subsists between the two facts. If the *nexus* is a universal, the junction between the two facts is necessary ; if merely a contingent proposition, their junction is contingent ; if an indefinite proposition, their junction is indefinite. To know in this manner by means of a mental *nexus* is deduction ; and the only rigid deduction, such, for instance, as science demands, is that which proceeds from universals.

To illustrate this process of reasoning more fully, let us quote the following passage from the chapter on Reason in Locke's Essay, and briefly comment upon it.

"Tell a country gentlewoman that the wind is south-west, and the weather loursing and like to rain, and she will easily understand it is not safe for her to go abroad thin clad in such a day, after a fever: she clearly sees the probable connexion of all these—viz., south-west wind,

and clouds, rain, wetting, taking cold, relapse, and danger of death, without tying them together in those artificial and cumbersome fetters of several syllogisms that clog and hinder the mind, which proceeds from one part to another quicker and clearer without them."*

Now, without agreeing with Locke in his wholesale condemnation of the syllogism, we think that the mind perceives the connexion between one of these terms and the next to it by deductive reasoning, and that consequently there is a simpler form of ratiocination than that to which the syllogism gives expression. The fact of the gentlewoman's uniting each of these facts with the one immediately following, proves that she thought of them as so connected; that is, each pair of terms, the first and second, the second and third, &c., came as a subaltern under its containing proposition in her mind; and according as the containing proposition was universal, contingent (mostly or commonly true); or indefinite, so would her conclusion be necessary, contingent, or indefinite in the junction of its terms. It rains, some one tells me: rain is contained in the proposition: all rain wets: therefore I conclude that this rain wets, though I do not observe it. The whole process when expressed assumes this form.

1st. Where only one fact is observed or stated.

It rains,
All rain wets,
Therefore, *this* rain wets.

2nd. Where two facts are observed or stated to be joined, but the senses are not able to determine the nature of their conjunction.

The cow ruminates,
All cows must ruminate,
Therefore, *this* cow *must*.

The first premise suggests the second—the second enables us to infer the third.

Now, the ordinary opinion is, that deductive reasoning consists primarily in proving that one term is connected with another by means of a middle term, which must be distributed in one of the premises at least.† Thus in *homo, animal, vivens*—*homo* is connected with *vivens* by means of *animal*, as in a chain of three links, the first is united to the third by means of the second; consequently the syllogism proves *mediate* junction between the two terms of the conclusion. This junction is enough to exonerate it from the charge of inutility so frequently brought against it; for mediate junction, if it has to be *deduced*, must be deduced according to the syllogism implied or expressed. We

* Essay, b. iv. c. xvii. sect. iv. p. 513.

† We omit the mention of arguments with a negative premise for the sake of brevity.

think, then, that the *first* step of deductive reasoning is that given by us above ; and that the syllogism is the *second* step, that it is, in fact, the first step of the Sorites.

Having shown that the simplest form of ratiocination is determining the necessary, contingent, or indefinite—*immediate* connexion of facts by means of universal, contingent, or indefinite propositions, we have next to point out how these are obtained.

Necessity and contingency are related notions, the first being the positive, the other the negative. The only idea of conjunction derivable from simple observation is what must be called indefinite or undetermined. Unvarying experience can only afford a strong presumption that two facts are necessarily connected : yet association has frequently fastened the connexion between two facts which have been invariably observed together, or between two ideas which have been always thought of together, so firmly that it was found impossible to undo it when it was afterwards proved contingent. In consequence of the difficulty experienced in destroying a long-standing association, some believe that the notion of necessity can be thus accounted for. If our experience all tends in one direction, and affords us no model or analogy to facilitate our conceiving two facts apart, then say they, we find it necessary to think of such facts always as they are presented to our experience, and the only necessity in the connexion of facts is this. Now, what clearly proves the erroneousness of this view is, first, that invariable co-existence or succession of phenomena, and association arising therefrom, are not always present where the notion of necessity is caused. One instance of what is required to prove necessary connexion does as well as a million ; secondly, the notion of necessary conjunction is caused where there *are* facilities afforded of framing a different notion, where there are *not wanting* analogies or models to assist us in imagining the two facts apart, and where it is indispensable to ascertain that such a conception of them is absolutely excluded.*

* The man who is said to have seen a French baby with a long nose (page 558 of our author's work) was under no necessity of thinking of all French babies under this type for ever afterwards. Yet it is possible that by continuing for a long period without attempting to think of them as differing from this specimen, an inveterate association might grow up in his mind between French babies and long noses. But not necessarily. The thought ought naturally to occur to a thinking mind that some French babies had short noses. For it is only when the supposition of a different combination of facts (such a supposition in the majority of instances being easily framed and readily suggested) is excluded by our knowledge that we are forced always to think of the unknown as precisely similar to the known. The ancients might have thought that there were black swans—for the connexion between swans and whiteness being to them a mere indefinite one, it did not exclude the conjecture that swans might vary in colour. Even where we have no means of imagining an object different from the model we possess of it, we can only say, we cannot picture it otherwise—not that it cannot *exist* otherwise, which is the character of a necessary connexion : when we *perceive* that the supposition of its being different is incompatible with our knowledge of it, then it is that we conclude that it cannot *exist* otherwise.

It is quite possible to conceive that oxygen and nitrogen might unite in other than definite proportions to form air till the supposition is precluded by accurate knowledge of its nature.

Now let us proceed to show that the notion of necessity enters as largely into the composition of thought as the commonest facts of mere sense-apprehension; for sense-apprehension is always attended with an inference of the following kind. When, for example, we see a stone, the mind runs through the form of deductive reasoning given above, implicitly and instantaneously. I see a stone: all stones are hard: therefore this stone is hard; and now this inference is not conclusive unless hardness and stones are necessarily connected in the mind. But let us state another example better calculated to lead us towards the point at which we are aiming. The statue is placed on a pedestal: all that is evident here to the senses is the relation in place which the statue and the pedestal bear to each other. But we assert with undoubting confidence that the statue *depends* upon the pedestal for retaining the place it does. How do we obtain this notion of dependency? By deducing it from a universal. But how was this universal first obtained? The relation which the two objects bear to each other in place certainly does not afford it. Let us search for it then in some other quarter. We observe that if an object placed under another, as a pedestal under a statue, is removed, the upper falls. Does this fact alone afford us the notion of dependency? No: for here all that is obvious to the senses is that one event is followed by another—mere antecedence and consequence—which Hume very justly maintained cannot originate the notion of a causal nexus. And which Reid clearly proved to be quite incapable of begetting the idea of necessity, seeing that then day must be considered as the cause of night, or night of day.

Mr. J. S. Mill endeavours to rescue the sensational theory of causation, thus overthrown, by adding that invariable sequence is not synonymous with causation, unless the sequence, besides being invariable, is *unconditional*. But here the word unconditional is intended to express more than the advocates of the sensational theory have a right to, exhibiting how difficult it is to keep within prescribed bounds, when those bounds are an arbitrary limit to the real powers of the mind, and how those who deny any of the faculties are forced to imply the very faculties they deny;—or it expresses merely one of the facts connected with causation, of which the senses alone are competent to take cognizance. But all that is manifest to the senses in an act of causation is, as we have seen, insufficient to account for the existence of the notions whose origin we are in quest of. But it is an undoubted fact that all men, implicitly or dogmatically,

hold certain connexions to be absolutely necessary and universal, as that two added to two must always make four.

We could not wish for a better specimen of the mind's being compelled to entertain the notion of necessity than Mr. Lewes exhibits, in his own case, in his criticism on "Hume's Theory of Causation," and on the "Fundamental Principles of Kant." While he labours hard to prove that there is no origin of ideas but what is denoted by the term "experience," he is all the while reminding us of Zeno in motion, when he denied the possibility of motion. Mr. Lewes maintains that there is something more in causation than antecedence and consequence, there is a causal nexus.

"It must be maintained that between those two events (cause and effect) there is a specific relation, a something which makes the one succeed the other, causing this particular effect rather than another; and this subtle link it is which is the nexus contended for; this relation it is which distinguishes a causal act from one of accidental sequence."

And "this subtle link," our author says, is apprehended by experience. Now here Mr. Lewes is actually preparing for taking his flight out of the confined nest of sensationalism, and does rise out of it a little, although he is careful to drop into it again. Mr. Lewes says that we have a tendency to think that two parallel lines will meet at some remote point, but that we correct this tendency by recurring to our experience. Now experience, which only enables us to obtain an indefinite notion of connexion, permits such a tendency, and when Mr. Lewes says that it is to be corrected by recurring to our experience, he is implying the faculty that does perform this office. Mr. Lewes affirms that all truths are necessarily true. If they are, it is assuredly not experience that informs us of the fact. Indeed the statement that all truths are necessary, is only another way of expressing what we have dwelt upon at a considerable length above, namely, that consciousness is veracious. Experience can only detect an indetermined conjunction between consciousness and veracity. The fact of our being constrained to confide in consciousness *as* veracious is no sufficient guarantee to reason that it is such: reason must know that the veracity we ascribe to it is *necessary* to the attainment of any certainty on this or any other point.*

* It may be observed that we have avoided the use of the phrase, "necessary truth," and substituted for it "necessary conjunction, or connexion of facts." If consciousness is veracious in its deliverances—*its demands being complied with*—all truths are necessarily true, not true to-day, but false to-morrow; but all conjunctions of facts are not necessary, for some are contingent. It is owing to this ambiguity in the phrase that we find Mr. Morell (Hist. of Modern Philosophy, 2nd Ed. vol. i. p. 298) stating that, according to sensational principles, "there can

Having attempted to prove that experience is not able to supply us with the notion of necessity, it may be thought that we claim for it an *a priori* origin—but we do not. We think, with Locke, that the mind is at first a *tabula rasa* in all respects, excepting, of course, its faculties; in short, that we possess no intuitions. We allow that such notions as goodness and badness, beauty and deformity, &c., have their origin in our emotional nature, but that the intellect has to discover what are the legitimate objects to which our emotions should be directed. For example, what is the true to the intellect, should be the good to the emotional nature; but to acquire the true there is no need of intuitions. We take our departure from the same point as Locke does, and follow the same method or way of transit, but we pursue it further than he does. We find within our mind notions which we cannot derive from our elementary faculties, at the same time we discover that without them they could not exist; and the manner in which we are conscious of obtaining them is this:—The elementary faculties provide the data: reason perceives the conclusion, which is a new truth, wholly distinct from any truth expressed by the data individually. Certain elementary cognitions *plus* the faculty of reason necessitate what otherwise could not possibly be known; and although we trace the dependence of the inferred truth upon the premises we can no more detect it in them severally (as we detect the particular in the universal) than we can detect water in oxygen and hydrogen. This intellectual procedure we call inductive reasoning.

It is commonly supposed that all reasoning is deductive, and since this kind of reasoning when conclusive starts from universals, that these are not established by reasoning. "Consequents cannot by an infinite regress be evolved out of antecedents which are themselves only consequents. Demonstration, if proof

be no such thing as truth which may not at some time prove error." That rain fell to-day can never by any possibility turn out to be an untruth. What, then, does Mr. Morell mean? He evidently intends to express, that according to sensational principles, there are no facts conjoined which may not at some time be disjoined. The same ambiguity has led Mr. Lewes, in his strictures on Dr. Whewell's theory of necessity, to state—"I conceive that no such distinction whatever can be made out between truths which are necessary and truths which are contingent. All truth is necessary truth." If we substitute the word conjunction for the word truth in this quotation, it will be easily perceived that Mr. Lewes misapprehends Whewell's doctrine, and confounds necessary and contingent connexion between facts with a proposition's being clearly ascertained to be true, or not yet positively ascertained to be true, and so possibly untrue. The possibility of our being in error is a very different thing indeed from contingency in the connexion of facts, for about the existence on every hand of such contingency there is no mistake: every conjunction which is not necessary is contingent—thus there is a connexion between the word man and a certain being; take away the word man, and that being still exists: therefore the connexion between them is contingent. Contingency therefore equals non-necessity.

be possible, behoves to repose at last on propositions which carrying their own evidence, necessitate their own admission." True, but the primary data need not be necessary and universal. The premises of inductive reasoning are particular propositions, or facts of mere observation. We hold, then, that induction precedes deduction. Reason pre-eminently we regard as that faculty by which we obtain universals for the purpose of scientific deduction; and without such universals we cannot conceive how we can arrive at other than probable conclusions.

Now having so far made ready the way for a formal enunciation of the process of inductive reasoning, we shall state what, after long, severe, and impartial testing, we deem the formula of such reasoning. But here we would call upon the reader to reflect that this formula is likely to be correct, exactly in proportion as it has already won a partial recognition; and that if we had to propound a principle which had previously gained no amount of acceptance, we might be certain that it was a mere invention of our own; for such truths do not grow up at once, like ephemeral insects, but slowly and for ages, like the oak. The formula is that implied by Sir John Herschel in his first two rules for finding out causes, that is, between them; but more nearly approached to by Mr. J. S. Mill in his second Canon, and called the Method of Difference. Our contribution to this principle will be perceived, if it be not already perceived, as we advance. The way in which we obtain the formula is this:—We perceive a connexion between A and B: of the intrinsic nature of this we have at first no knowledge, and so relatively to ourselves call it indetermined or indefinite connexion; and mere experience we contend cannot enlarge our knowledge in this respect. But we observe that if A be removed, B disappears. In this again, all that is obvious to experience is, that one event follows another, which, it has been ably contested, is no proof of causation. How then do we obtain such a notion? By comparing together,

A is connected with B,
and

When this A is not, this B is not:

which being done, reason perceives that A is necessary to the existence of B. Now, without these premises, and a faculty to draw a conclusion from them, we cannot conceive that the human mind could ever be in possession of such notions as causation, necessity, dependence, essentiality, &c.

This formula admits of two variations, as follows:—

- 1st. A *plus* B,
 $\text{Minus this A minus this B.}$
 Therefore A is the cause of B.

2nd. *Minus A minus B,*
 Produce this A you produce this B,
 Therefore A is the cause of B.*

The *first* is the form of reasoning when we observe the supposed cause or causes, or presupposed entity in connexion with the effect or supposing or involving entity, and ascertain the negative premise in order to prove our previous belief. The *second*, which is substantially the same as the first (for we only start with the negative instead of the positive premise) is the form of reasoning when we search for effects instead of causes.

Time and space will not permit us now to point out how the premises of inductive reasoning are to be arrived at when the cause is concealed, as it generally is, by unessential concomitants; how we may know what is *not* the cause; and what affords *primâ facie* evidence of being such, before we obtain all that is requisite to prove it to be the cause; and how the cause is frequently to be ascertained by deduction from the universal, every change has a cause or its equivalent—all that cannot be the cause being previously abstracted.

We have now shown how necessary conjunctions are apprehended: how are these converted into universal propositions? Curiously enough this remaining part is accomplished according to the law of contradiction, which would be rightly termed universalization. For example, when we have ascertained that arsenic causes death by an induction in the second form, thus, before this man took arsenic he was quite well, when he took

* By A is to be understood whatever is necessary to produce B; and we believe that an effect is produced by the junction of two elements at least, as *one* added to *one* makes *two*; and that one of the elements *at least* must be modified by the other: they may modify *each other*, and that to such a degree as to become completely changed, as in chemical combinations. The word *this* in the second premise of these forms is to insure against a different A and B being meant in the second premise from what are contained in the first: thus, *this* man is a good mathematician, and he is a good reasoner: *that* man is not a mathematician, and he is not a good reasoner: therefore, &c., is a fallacious induction, because the negative premise is not negative to the positive, but is quite independent of it. The judge, who Mr. Macaulay relates, "was in the habit of jocosely propounding, after dinner, a theory, that the cause of the prevalence of Jacobinism was the practice of bearing three names," would have lost his fun had he been aware of this law. Perhaps the best way of stating the formula would be thus:—

- 1st. This A is B and it is C.
 The same A is not B and it is not C.
 Therefore B is the cause of C.
- 2nd. This A is not B and it is not C.
 The same A is B and it is C.
 Therefore B is the cause of C.

Here we regard B and C as attributes of the same substratum A: in the text they are regarded, under the titles of A and B, as abstracted from any substratum. The latter plan allows the formula to be stated more neatly than the former, which nevertheless answered more fully the purposes of our exposition.

it he died, &c., we also conclude that arsenic would kill any one to whom it was administered in sufficient quantity, and afterwards deduce from this universal. But how do we become convinced that it must be universal? If we suppose that arsenic some time or other may not cause death, we are supposing that there is only a contingent connexion between its being taken and the event which follows its being taken; that is, in stating the supposition we are forced to predicate contingency or non-necessity of necessity—*supposed* contingency of *demonstrated* necessity, which clearly shows that the supposition is not tenable. A triangle is a figure which *must* have three sides (the *must* would be here *implicitly* inferred), but a triangle may not always have three sides, are propositions which cannot both be true, but the first is *proved* true; consequently it is true beyond dispute that *all* triangles have three sides.

Here we must be looking out for the end; but before we conclude, it behoves us to inform the reader that, although we firmly believe that every man reasons inductively according to the formula we have propounded, we do not mean to assert that valid inductive reasoning always supposes the knowledge of it. We reason in accordance with it implicitly, long before we do so explicitly. Every mental operation takes place spontaneously before we become aware of its character. The knowledge of an intellectual process supposes that process, as the science of optics supposes the existence of sight. So far, we think, that Mr. Macaulay is correct in saying "that the inductive method has been practised from the beginning of the world by every human being.* But we cannot agree with him when he says, "We think it is quite possible to lay down accurate rules . . . for the performing of that part of the inductive process which all men perform alike, but that these rules, though accurate, are not wanted, because in truth they only tell us what we are all doing." We must lay particular emphasis on the fact that implicit induction only sufficed for establishing the data of our earliest deductions,† and those of the elementary sciences. When data

* Essay on Bacon.

† It is surprising how different facts are made to appear according to the theory which is brought to bear upon them. Mr. Mill (*System of Logic*, &c. i. p. 210) writes:—"Not only may we reason from particulars to particulars without passing through generals, but we perpetually do so reason. All our earliest inferences are of this nature. From the first dawn of intelligence we draw inferences, but years elapse before we learn the use of general language. The child, who, having burnt his fingers, avoids to thrust them again into the fire, has reasoned or inferred, though he has never thought of the general maxim—fire burns. He knows from memory that he has been burnt, and on this evidence believes when he sees a candle, that if he puts his finger into the flame of it, he will be burnt again. He believes this in every case which happens to arise; but without looking in each instance, beyond the present case. He is not generalizing; he is inferring a particular from

pertaining to subjects of a more advanced and less accessible and intelligible nature had to be obtained, the implicit process failed. While men were scientific in geometry, they were romancers as to the stars; and now that they have won its secret from the heavens, and can sail round the world by the light of science, they still trust to empiricism for navigating the ship of state. When facts were obtruded upon the mind, and were possessed, so to speak, of a perfectly transparent aspect, or admitted of being painted on the imagination with the vividness of reality, universals would follow as naturally from them as talking from the possession of the faculty of language and a vocal apparatus. But where facts did not come unsought into the mind, and when they were not distinctly and clearly possessed, there would be no implicit induction. For unless the premises of inductive reasoning had that character which, in concert with reason, constitutes them causes of universals, no universals would follow. But for the premises to be of this lucid nature, and for us to be aware of the form they should assume, are two very different things, as different as trusting entirely to nature for the supply of our wants, and supplying them artificially. And thus it is that we possess some data so fully, but cannot account for their genesis, and consequently call them *self-evident*. But there are some who, in attempting to account for their origin, deny their universality, and call them mere generalizations from experience. There is truth on both sides, but error also. Truth is generally brought to light by conflict between those who ask too much and those who grant too little—between the dogmatists and empirics on the one side, and the sceptics or critics on the other. Men, however, must begin by being dogmatists; they must learn the alphabet of science, and spell out its easier parts before they become proficient enough to undertake more recondite researches; and their reasoning at first would consist in drawing conclusions from universals implicitly obtained. This method of reasoning deductively from data spontaneously supplied would naturally be imitated wherever it was found that unaided efforts were not equal to the task of clearing up the mysteries of being. But its use would be limited in such cases to the knowledge they had of it, to the extent to which it had become explicit. Axioms

particulars." Mr. Mill here very clearly describes what is *explicit* in our earliest inferences; but what really does take place in the unexplored recesses of the mind we believe to be that process which we have attempted to explain—namely, to take the example given by Mr. Mill, an induction in the second form, thus:—Before the child touches the fire he is *not* burnt: but when he does touch it he is burnt; therefore the child concludes *implicitly* that touching the fire is the cause of his being burnt; which conclusion he *implicitly universalizes* into All fire burns: from which universal he ever afterwards *implicitly* deduces, that if he puts his finger in the fire it is sure to be burnt.

and definitions being considered *self-evident*, attention would be centred, as a matter of course, on deduction, hence the development of this portion of reasoning long before the other, and the almost universal application of the deductive method to all branches of knowledge. Where implicit induction accomplished all that was needed, several sciences were established with small reflective knowledge of the processes of reasoning; but where this spontaneous procedure was checked by increasing turbidness and depth in the widening river of knowledge, men endeavoured to supply its place as best they could, and this would be at first by a very crude imitation. In room of universals supplied spontaneously by Nature's bounty, they would invent what they thought the most reasonable principles, imagining, as they at first could not avoid doing, that all first principles must be deduced from the mind. The consequence was "the multiplication of systems in every conceivable aberration from the unity of truth," teaching men the salutary lesson that they must learn before they can teach. Bacon rightly describes this era in reasoning, it seems to us, therefore, when he says, that men have sought to make a world of their own conceptions, and to draw from their own minds all the materials which they employed. It was inevitable that they should; this was the provisional step which prepared the way for the scientific period. It was imitating the model they possessed as far as they understood it. But even this primitive method, when applied to less accessible phenomena, involved some degree of observation, for without that it would be impossible to invent a theory bearing any relation to the facts; and thus would be partly laid the foundation of the explicit development of inductive reasoning.

But a great forerunner of scientific induction was that spontaneous generalization from experience, which resulted from man's being placed amidst those numerous uniformities of nature which every moment of his waking life could not otherwise than attract his notice. These spontaneous generalizations would be so many data from which men could reason deductively. But how many of them would be legitimate data, and how many not? Such of them as were simple enough to permit of implicit induction taking place would be established universals; but such of them as did not admit this would be no better than indetermined conjunctions, and any conclusions drawn from them might be true—might be not. Now it was only in the former of these instances—that in which implicit induction took place, that the idea of causation would be arrived at. In the latter, where *inductio per enumerationem simplicem* was all that occurred, the idea of causation was unattainable, for here only one of the premises of inductive reasoning was to be met with: whereas both are

essential to our acquiring the notion of one thing being necessary to the existence of another. When Mr. J. S. Mill, therefore states that,

“As all rigorous processes of induction presuppose the general uniformity, our knowledge of the particular uniformities from which it was first inferred was not of course derived from rigid induction, but from the loose and uncertain mode of induction *per enumerationem simplicem*: and the law of universal causation, being collected from results so obtained, cannot itself rest on any better foundation.”*

When he states this he is clearly in error: causation can only be inferred from *rigid* induction; and the law of causation is an universal, which the mind cannot help acquiring by implicitly abstracting from *specific* universals spontaneously obtained *that* in which they all agree, thus resting in the *generic* universal—the axiom of induction, namely, Every thing which does not exist *per se* exists *per aliud*; that is, it is either primordial and presupposes nothing, or it is not primordial and supposes an antecedent.

But in the latter of the instances mentioned above, namely, where merely *inductio per enumerationem simplicem* took place, many of the principles of physical science would be gained, because this loose and unscientific method would be applied in cases where the use of the complete method would have been rewarded with successful results. As objects requiring the use of the inductive method came to be seriously inquired after, in the same degree there grew a demand for its further explicit development. So while the study of natural philosophy created a demand for the inductive method—that method by this means, first empirically, and then scientifically, disclosing itself would facilitate the solution of more abstruse problems, by turning mere forest tracts into broad and level roads, and superseding the picturesque, but unsafe, stepping-stones of a ruder period by bridges finely constructed.

Taking the view that we do of the value of a clear knowledge of the laws of reasoning, the question—what is the use of logic? is easily answered by replying, that it cannot be dispensed with. When this question has had to be answered by some of our most eminent logicians, after they had made the admission that logic could merely tell us what we were all doing admirably well already, it required no small amount of ingenuity and enthusiasm to plead on behalf of the study of this science, for there were persons always ready to object that the knowledge of the processes of reasoning aids us no more in the practice of it than an acquaintance with anatomy enables a man to walk any better

* System of Logic, ii. p. 97.

than one profoundly ignorant of that science. But this remark applies solely to *implicit* reasoning, which we have shown does not go with us much beyond the confines of the region we have to explore. That we need an explicit statement of the laws of thought from first to last, let the battle that is raging between Positivists, Individualists, and Traditionalists, assure us. We feel convinced that nothing but the general recognition of the One True Method will dispel the anarchy which now exists in matters of a social and moral kind. Because we can reason implicitly on questions demanding little exertion of intellect to comprehend them, and indeed on abstruser subjects when we devote so much attention to them as to make them thoroughly our own,* it does not follow that we can reason on all sorts of intricate questions—beheld, too, through the obscuring Gehenna atmosphere of self-interest and prejudice, any more than the earth is able of itself to supply all that an advanced agricultural skill can win from it, because in the first place it yielded sustenance spontaneously to its rational inhabitant—man. We think that the minds of individual men (none of them harmoniously developed, but full here, defective there) in exploring the vast unknown need help; and that this help is to be derived from a reflective knowledge of the mind's own laws, those fundamental facts, varying in degree, but never in kind, which underlie the more variable attributes of thought, and which cannot be absent without the mind's being dethroned thereby. The individual mind is not self-sufficient: it must be consciously endeavouring to obey the Laws of human thought. Bacon, says Coleridge, "supposes that the Intellect of the individual or *homme particulier*, may be refined by the Intellect of the Ideal Man, or *homme général*."† And it is superfluous to state who it was that said—"The real cause and root of almost all the evils in science is this, *that falsely magnifying and extolling the powers of the mind*, we seek not its real helps."

"Though various foes against the truth combine,
Pride, above all, opposes her design."

* This is what Dr. Whewell seems to have in his mind when he says, "I must explain, that I do not by any means assert that those truths which I regard as necessary are all equally evident to common thinkers, or *evident to persons in all stages of intellectual development*. I may even say, that some of those truths which I regard as necessary, and the necessity of which I believe the human mind to be capable of seeing, *by due preparation and thought*, are still such, that this amount of preparation is rare and peculiar; and I will willingly grant, that to attain to and preserve such a clearness and subtlety of mind as this intuition requires *is a task of no ordinary difficulty and labour*."—Letter to the Author of "The Prolegomena Logica."

† Treatise on Method, sect. ii. p. 52. Encyc. Met.

ART. V.—FOREIGN PSYCHOLOGICAL LITERATURE.

SINCE our last *résumé* on this subject, our continental brethren have been pursuing, with their usual zeal and ability, those enquiries which, both in their speculative and practical aspect, form the special objects of our research. The *Annales Medico-Psychologiques*, edited by MM. Baillarger, Cerise, and Moreau, contain much instructive and interesting matter.

M. des Etanges has been engaged for some years in an inquiry into the *Causes of Suicide in France since 1789*. His communication is as yet only introductory; his views not quite developed; yet it is plain that he does not consider suicide inevitably and invariably a mark of insanity or mental aberration. He recognises "disgust of life" as a fruitful source of self-destruction.

"Need we say that the intervention of medicine (strictly so called) is here of no value? We are entering upon an order of facts and ideas, which have no connexion with pathology, and which, consequently, have no relation with, nor anything to hope from, therapeutics. The *Materia Medica* does not furnish, to our knowledge, any heroic remedy against despair or disgust for life, and it is with astonishment mingled with compassion that we see it advanced gravely by a certain Dr. Retz, that by emetics we may not only cure the spleen, but turn men from all vices. From the material impotence of art, however, in presence of a moral disease, we must not conclude that the physician has only to remain a passive spectator of these incessant strifes, these ardent conflicts of will and instinct, of necessities and passions, in which the activity of society consumes and nourishes itself without ceasing. In this difficult analysis, the physician is the best judge to consult, the best guide to follow. Who better than he to aid the moralist or the legislator! Social torments, and the storms of private life send him sufficient victims to make him acquainted with our miseries and aberrations. Daily witness of the excesses and the miseries of humanity, he knows better than any other by what hideous ulcers the social body is devoured; and thence for him spring the right and the duty to denounce the progress of the evil, and to expose all its deformity."

M. des Etanges expresses a very strong but rather undefined objection to the statistics of suicide as calculated to throw any light upon its causes. He prefers the *weighing* of evidence to its *enumeration*. He proposes hereafter to enter upon an examination of the value of the various causes of suicide under the following division:—

SECT. I.—*Influences exercised by the social condition.*

1. Political events: revolutions, civil wars.
2. Scepticism, incredulity, forms of belief.
3. Imagination: pride, reverie, depression.

4. Fear of dishonour; fear of the police; points of honour; duelling.
5. Domestic trouble, quarrels, threats, and ill-treatment.
6. Love.
7. Wretchedness.
8. Misconduct, drunkenness, debauch.
9. Play, lotteries, speculations, &c.

SECT. II.—*Effects of organic laws.*

1. Spleen, or low spirits.
2. Imitation.
3. Monomania.
4. Hereditary influence.
5. Disease.
6. Mental alienation.

In describing his access to the public documents relating to suicide, he says:—

“Our documents, moreover, are distinguished from most others in this particular, that they serve as an envelope for the instrument used by the suicide, whether poison or mechanical means. In this funereal museum, of course, are not found such arms as are too large to be wrapped up in the papers, as sabres, guns, horse-pistols, &c. Fire-arms, nevertheless, were represented by one little copper cannon, with which a miserable child, aged twelve, had had the cruel *sang-froid* and the fatal address to kill himself. Yet more—full of his resolution, he wished to leave no doubt of the fact, and with a burnt stick he wrote, ‘I have blown out my brains on purpose’—*Je me suis brûlé la cervelle exprès!*”

M. des Etanges thus concludes:—

“To seize thus upon all the causes of suicide, joining thereto the avowal of the victims themselves—is it not to unveil our moral, physical, and intellectual miseries, and to publish entire the *confession of society?*”

On Prison Insanity.—M. Sauze, physician to the prison and asylum of Marseilles, enters upon the question, hitherto much disputed, of the influence which imprisonment, solitary or otherwise, has upon the production or development of insanity. He quotes sundry conflicting opinions, previous to giving the results of his own experience, and his deductions therefrom. M. Ferrus says that Specialists have only in *very rare cases* recognised the existence of mental malady solely due to the despair of detention. M. Lélut, and M. Tardieu, have arrived at conclusions on the whole favourable to the cellular system. M. Lélut establishes:—

“1. That in ordinary societies, there are about two insane individuals in the thousand.

“2. That in all prison life, for reasons drawn from the very nature of this life, the proportion is much more considerable, rising to three,

four, five, six, and even fifteen in the prisons on the old plan; but that in the new ones it is not more than two or three in the thousand at most."

These figures prove, says the author, that the modern cellular system is much less unfavourable in its mental influences than the ancient aggregate imprisonment. On the contrary, M. Pietra-Santa, physician of Mazas, investigating the same subject, arrives at conclusions directly opposed to those of M. Lélut:—

"That mental alienation is much more frequent at Mazas than in the public prisons, and,

"That the augmentation of suicides continues to be very considerable. During four years, since the opening of Mazas (where the cellular system is practised) the number has been twelve times as great as in the old 'Force,' or 'Madelonnettes.'"

M. Sauze takes the view of M. Ferrus and M. Lélut, and considers that the population of the cellular prison of Marseilles, approaches, in respect of mental disorder, very nearly to that of the general public. In support of this view, he gives in considerable detail, a report of the cases which have fallen under his own observation, at too great length for quotation; and derives from them the following conclusions:—

"1. The causes of prison insanity are in general independent of the imprisonment, whatever may be the system pursued.

"2. Mental alienation is in general *anterior* to the entrance upon prison life, and even generally to the trial.

"3. When it is developed in prison, it is even then the result of causes sometimes alien to the imprisonment.

"4. The most numerous causes of prison insanity are inherent to the prisoner, and not to the prison.

"5. They consist especially in individual predispositions, such as inheritance, imbecility, idiocy, epilepsy, previous attacks of aberration, or lives of privation or debauch.

"6. There exists the strongest analogy between the insane and a certain class of prisoners composed of men of incomplete organization.

"7. A certain part of the prison population would be better placed in asylums for the insane.

"8. The number of condemnations of the insane is very considerable.

"9. The cases of insanity which manifest themselves in prisons are not due solely to the influence of incarceration; but to various causes connected with general debilitation, and especially the insufficiency of nourishment."

On the 6th, 7th, and 8th clauses, M. Sauze has the following judicious reflections:—

"Besides the direct causes of mental alienation which I have passed in review, there exist in prisons numbers of individuals, whose mental condition, without being that of actual insanity, cannot be considered as one of perfect reason. This intermediate state between reason and

folly is the result of an incomplete cerebral organization, and of a vicious education. In such imperfect beings can we admit that there exists a healthy notion of right and wrong? Must we not admit, with Gall, that the free will (*libre arbitre*) in these cases has not the same power and force, and that it is more or less modified or restrained? Is it not evident that these men are driven to crime by the vices of their organization, and that they have a claim to the plea of irresponsibility? For my part, I do not hesitate to answer in the affirmative; and I am sure of having the approbation of all those who think with just reason that the study of organs and their functions is the most solid basis for a sound philosophic doctrine. The analogies which exist between the insane and a certain proportion of our prisoners become still more evident when we consider comparatively the *movement* of the population in our asylums and prisons. It is not uncommon to see one individual sent alternately to prison or to an asylum, according to the varying appreciation of the tribunal. I have often had occasion to observe this remarkable fact. What I say of the civil population, is equally applicable to the military. Our asylum receives soldiers from the army of Algiers and from the Ninth Division. We have very often soldiers, men of defective organization, who are destined all their lives to reside alternately in prison or in the asylum.

"From all this it clearly results that the tribunals daily condemn to punishment insane persons, who should be considered irresponsible. A great number of those condemned for mendicants and vagabonds belong to this category. . . . Let us hope that as these complaints are multiplied, justice will decide at length to appeal more frequently to the light of medicine; and no longer treat with distrust the science which has brought to bear so much precision and vigour upon the appreciation of psychological phenomena."

On Dreams.—M. Alfred Maury enters rather elaborately into an investigation of the phenomena of dreaming, with a view to the formation of a theory, which does not seem as yet to be quite completed. His observations are entirely upon his own dreams, and seem to have been carried on for some time in a most systematic manner. It may be questioned, whether his method may not in great measure have influenced or produced the results. He traces in many cases, a strong analogy between the mental manifestations of dreams, and those of childhood or senility. He accounts also for memory and association on physical principles; and also for what is called the spontaneous development of ideas, in a manner which might lead us to suppose that his theory of life and mind was altogether physical or material. Perhaps we misinterpret his intention—but we will quote his own words. Speaking of the apparently spontaneous origin of certain ideas, he says:—

"Ne serait ce pas parceque il se produit en nous, sous l'empire de causes morbides, perturbatrices, ou simplement modificatrices de telles parties de notre organisme, des mouvements qui se répercutent dans

le cerveau sur un des millions, des milliards de fibres, de molécules matérielles dont il est composé, et là, le mouvement transmis se communique à celles de ces fibres ou molécules que les réflexions ou les préoccupations antérieures avaient comme laissées douées d'un mouvement vibratoire. Cette explication rend compte également de la mémoire spontanée, phénomène si étroitement lié à celui de la génération spontanée des idées."

And further on he observes :—

"These spontaneous vibrations are certainly placed under the dependence of the different regions of the organism, of which they are the echo."

After the enumeration of many facts connected with the frequent hallucinations in the half-waking state, and other phenomena of perfect dreaming, he continues :—

"We may say, in presence of these facts, that man is an automaton, WILL occasionally influencing or winding up the spring—Habit being the balance. This automaton continues to act when the will is absent, so long as the spring unwinds itself. Once the clock wound up (*l'horloge montée*) the works continue to move, a little influenced, however, by exterior causes and internal modifications attendant upon their composition and nature. In the best made intellectual clocks, that is to say, the strongest and soundest intellects, the intermission of the action of the will takes place at extremely short intervals; but the more enfeebled the intelligence, the less active is the will, and the more constantly the machine is left to obey the law of automatism which is proper to it (*qui lui est propre*). It is but justice to M. Maury, however, to state that in the close of his paper he does verbally recognise an immaterial existence in the words, 'cet univers invisible et immatérielle qu'on appelle l'intelligence.'"

Observations on General Paralysis, by M. Baillarger.—According to the statistics of MM. Aubanel and Thore, there died in the Bicêtre, in 1839, 164 insane patients, of whom 125 were affected with general paralysis—three-fourths of the whole. In the hospital of the Senavra at Milan, devoted to the same class of patients as the Bicêtre, there died in 1853, 60 insane persons, of whom one only was affected with general paralysis. On the rarity of this affection in Italy, Esquirol speaks very decidedly; and M. Guislain considers it as almost entirely absent. "This," says he, "is the more extraordinary, as this affection has been often considered as a result of inflammation, and as Italy is especially a country where inflammatory affections are frequent and intense."

M. Baillarger, whilst recognising the comparative infrequency of general paralysis in Italy, considers that it is more frequent than appears from the above statements. The discrepancy seems to arise from many of these cases having been described and

classified as *meningite lente*, a very frequent affection, treated by a more or less energetic antiphlogistic treatment. M. Baillarger gives the details of a considerable number of cases which were thus classified, and which were certainly undistinguishable from what is now generally recognised as general paralysis; characterized by embarrassed speech and gait, progressive paralysis of the limbs, and ambitious delirium. The most frequent morbid change found was thickening or adhesion of the membranes.

On Simulated Insanity.—There are numerous cases related in the recent journals of medico-legal investigations into the mental condition of criminals, all containing more or less matter of interest. We select one of simulated insanity, investigated by M. Morel, as especially instructive, from the careful observation of facts, and the highly philosophic method of induction from these. The *instruction* related that Pierre Derozier, aged forty-one, hawker, without domicile, was accused of twelve robberies of churches. On the 26th of January he answered with perfect clearness to the “*juge de paix*” of Gournay, and acknowledged himself guilty, entering into the most precise details. He spoke of an accomplice by the name of Chapoteau, who has not been found. He was still coherent on the 1st and 5th of February. On the 12th of March, he refused to reply to interrogation, and preserved absolute mutism, also on the 4th of April. The 13th of May he made incoherent and irrelevant answers, and has since then given way to many insane acts and some violence, and occasionally said that he was mad. M. Caron, of Neufchatel, had examined him and reported him insane.

M. Morel, having taken the usual oaths, was introduced to the prisoner, whose personal appearance he describes minutely, and also his actions. He was restless and incoherent, perpetually moving about and turning round on his axis. The name of Chapoteau continually occurred in his discourse. He had robbed him of thirty-five millions, and ought to be shot. He refused to eat, professing to fear poison. In the night he was tranquil. “The existence of Derozier in the daytime is that of some automatic and extravagant insane persons. He sits in the corner, balances himself from right to left, or backwards and forwards; he picks up bits of straw and feathers; his eyes are half shut, and perpetually winking.” The physical condition was in all respects normal; no sign of general paralysis. Interrogated as to his age, he replied “245 francs, 35 centimes, 124 carriages, &c., &c.” To the same question, more distinctly asked, he replied, “5 metres, 75 centimetres.”

Q. Have you been long deranged?—A. Cats, always cats. Yes, I am not mad.

It is unnecessary to go through all the details of the interrogatory. All his answers were determinedly incoherent, having no relation whatever to the question.

M. Morel thus reasons upon the phenomena :—

“I do not hesitate to say, that the answers of Derozier are not those of an insane person. In their extreme aberrations, in their most furious delirium, *madmen do not confound what it is impossible for the most extravagant logic to confound*. There is no madman who loses the idea of *cause*, of *substance*, of *existence*. I will explain by examples. If we ask an insane person his age, he may answer six millions of years or six months—he may say that he is no age, because he is dead; but the most incoherent madman will never reply 245 francs, 35 centimes. If asked concerning his parentage, he will say that he is the son of the king, the emperor, or of God; but he will never make a reply which could have no reference to causation, to substance, or existence. Once more, the most incoherent will not confound the idea of time with that of distance, &c.

“But leaving abstract psychology, let us inquire to what class of the insane does Derozier belong, if he be insane.”

M. Morel successively excluded from consideration general paralysis, mania, dementia, melancholy, and kleptomania, by an elaborate argument, and considering that Derozier simulates insanity, and simulates it unskilfully, he reported to that effect to the judge. A second examination, with etherisation, led to the same conclusion. After a very long consultation, the jury condemned him to the “travaux forcés.” Immediately after his condemnation, his insanity ceased, and he acknowledged the fact of simulation, his reasons, and the difficulty he had experienced in sustaining his part, in language which evinced a more than ordinary amount of intelligence. His concluding words were rather remarkable. On being urged to attempt by good conduct to merit some commutation of sentence, he replied with a melancholy shake of the head, “Once entered on an evil course, it is scarcely possible to leave it. I am forty-two years old; it is too late. I retire now from the world; I enter the cloister; my rôle is played out.”

On Delirium Tremens.—M. Pinel, jun., has published recently a short treatise on delirium tremens, in which he proposes a new method of treatment, that by bathing, almost without other aids. He enters at some length into an examination of the symptoms, particularly as to their diagnostic value, and traces skilfully the points of distinction between this affection and others with which it may possibly be confounded in the earlier stages of its apparition. These are meningitis, meningo-cephalitis, encephalitis, typhoid fever, nervous delirium, acute and maniacal delirium, other forms of toxic delirium, the delirium that succeeds

epilepsy, and dementia with or without general paralysis. He considers that it is often very difficult to form a correct and ready diagnosis between this latter disease and delirium tremens, especially as the one is often complicated by the other. There are, however, certain distinctive marks which must be borne in mind. In mania complicated with general paralysis, the tongue is ordinarily not foul as in delirium tremens; the appetite is good; the breath is not strong and alcoholic; the skin is dry and harsh; the loss of sleep is rarely constant; the physiognomy is happy in expression; the delirium generally turns upon riches or grandeur; the hallucinations are as a rule essentially distinct from those of oinomania.

After reviewing the methods of treatment which are or have been hitherto employed, M. Pinel gives the preference to opiates, but complains of frequent want of success even by this method. He then says:—

“Prolonged hot baths, with continual aspersions of cold water to the head, appear to be the best means of cure for delirium tremens—with or without opiates. For fifteen years we gave these conjoined with the hot baths; now, we have almost renounced them, finding that the baths alone are sufficient to effect a favourable result in one, two, or three days at the most, without the least risk to the patient.”

The special apparatus is described at some length by which the hot bath is kept up at the same temperature, and the cold constantly applied to the head. M. Pinel states:—

“The duration of the bath varies from one to five, ten, fifteen, or even twenty hours, according to the intensity of the affection. It is not prudent to continue it longer—it is better to renew it on the morrow. After their bath, we prescribe a hot water drink frequently, so as to keep up perspiration. During the bath also, lemonade or some diluent is taken frequently.”

Some cases are given in illustration of this method of treatment, from which it would appear to be eminently successful. Except in hospitals, however, it would appear to be difficult of application. M. Pinel enters slightly but judiciously upon the general bearing of the question of drinking upon social and national relations; and also discusses the propriety of the isolation of those who have had frequent attacks and relapses into the vice. The social and legislative difficulties attendant upon this point appear, however, at present to be almost insuperable.

Case of Poisoning and Acute Mania from the use of a Cosmetic.—M. Moreau relates a case of poisoning and mania resulting from the use of a cosmetic containing lead and other poisons, which is sufficiently interesting to be quoted at length.

“Valleau, æt. 29, hairdresser, entered the Bicêtre on the 9th of

June, 1855; he was examined, for the first time carefully, on the 11th. He was in a state of profound stupor, from which nothing would rouse him—the eyes were immoveable. One remarkable phenomenon struck us—the hairs of the pubis and of the chest were perfectly white—those of the head were, some white, some rather red, and some with a blackish tint. Each of the cheeks and part of the neck had greyish-yellow patches upon them, like jaundice. Similar spots were found on the left thigh.

“There was no fever; the tongue was a little loaded, and there was constipation. M. Moreau prescribed a bottle of seidlitz water, and two issues to the neck.

“On the 12th he did not answer to any questions, but seemed to be uneasy, and to make efforts to speak—he frequently raised himself in bed.

“On the 13th he was in a more satisfactory condition—he replied to our questions, but seemed to have lost his memory, and gave a very imperfect account of what had happened to him—he knew that he was a hairdresser, but not where he lived—he remembered having invented a pomade for the hair, and having used it himself, but could not remember the composition.

“On the 14th he was completely recovered from the stupor, and was much distressed to find himself at the Bicêtre—he gave with much precision the details which we required; for some years back, his hair had been turning white, and to remedy it he had composed a pomade, of which the elements were very active—viz.,

Litharge	400 parts,
Quick Lime	200 „
Prussiate of Potash	50 „
Nitrate of Silver	20 „

Fifteen days before his entry, he had commenced using this compound, and in three days had used above a pound and a half! The hair became partially black, but accidents began to occur; he had violent colics and headache. By his own account, his intelligence remained clear, but his employer from the first observed a change of character; he had become sad, and performed his duties with less skill than before; he continued to work still. But on the 9th of June, although twelve days had elapsed since he discontinued the use of the pomade, he became ill, and remembered nothing from that time till his awaking to consciousness in the Bicêtre on the 14th. Information given by his employer supplied the gap. Delirium set in suddenly, and the patient became violent; he threw on every side his instruments, and tore his papers; he believed that he was pursued by his enemies, who wished to poison him. In this condition his employer sent him to the Bicêtre, where stupor succeeded to the previous excitement.

“On the 15th, a little weight on the head, and some gripings were all the remains of the illness. On the 19th he was quite well, and was discharged.”

M. Moreau naturally attributes this affection to the head; and considers, in opposition to the opinion of some toxicologists, that

it was through the skin that the effects were produced. He concludes with the following remarks :—

“Whatever may have been the mode of introduction of the poison, there are facts in connexion with the subject of the highest importance to those who use habitually such cosmetics. It is well known how extensively this practice prevails amongst dramatic artists, and also amongst females of a certain class. All physicians, those especially who have any professional knowledge of actors and actresses, know how subject they are to nervous affections of all kinds, from the slightest to the most formidable. Instead of constantly referring these affections to the baneful influence of moral impressions, as it is so much the custom to do, would it not be more rational and more scientific (although perhaps less poetical) to suspect simply lead poisoning? This question we only suggest, leaving it to others to decide.”

Treatment of Epilepsy and Chorea.—M. Trousseau, of the Hôtel Dieu, has the following observations on the treatment of epilepsy by belladonna :—

“I have always a number of patients in Paris and the departments under treatment. In some the belladonna fails entirely, in others it has brought some relief. This is my mode of procedure: I give a pill containing one centigramme of the extract and an equal quantity of the powder of belladonna during the first month—by preference in the evening; partly because of the inconveniences attendant upon this remedy at first, and partly because epilepsy is most frequently nocturnal. After a month I give two such pills at once, for an equal time—and then three, providing it be well tolerated—if not the dose is only increased once in sixty days. A register is kept of every attack—if at the end of six or nine months, or a year, their frequency is decreased, I press the remedy, for I know that the disease is yielding. By proceeding thus, you will moderate the frequency of epileptic attacks in many cases—in many others, however, you will obtain little or no benefit. In twelve years I have thus treated 150 patients, and have cured 20. But will not even they relapse?”

In chorea M. Trousseau has introduced the use of strychnine with great advantage; but as to produce its proper effect it has to be given to such an extent as to produce its specific physiological results, it requires constant supervision and watching. It is given in small but continually augmented doses, and even to young children; the reports of the cases show a slight but marked advantage in this over the previous methods of treatment in the time required for cure.

Dr. Legrand du Saulle, in the *Annales Medico-Psychologiques* for April, 1857, after noticing M. Herpin's treatment of epilepsy by the oxide of zinc, has the following observations :—

“It may be remembered that M. Champouillon has related many cases of epilepsy in soldiers suffering from anasarca, which cases he attributes to the pressure of the serosity upon the nervous centres—a view con-

firmed by the fact that the anasarca and the epilepsy have simultaneously decreased under the influence of hydragogues and drastic purgatives.

"This idea of the intervention of pressure in certain forms of epilepsy seems to have been the foundation of the curative method introduced by M. Hiard. According to this authority, epilepsy results from *the interruption of the electro-vital fluid*. This interruption is produced by a transitory congestion of that part of the spinal ganglion included in the occipital foramen. The therapeutical indication deducible from this purely ideal view, is to combat the intermolecular stasis by means of bleeding; but M. Hiard prefers purgatives and cutaneous revulsives.

"During the first month of treatment, two purgatives of castor oil are given every week; afterwards reduced to one, which is continued until convalescence. At the same time he employs slight vesicants alternately to the legs, and liniments of camphorated spirit to the body generally. M. Hiard never bleeds nor uses diuretics, because he says the oil has always succeeded, at least in recent cases."

Idiocy and Cretinism.—*Contributions concerning Idiocy.*—The first of these contributions is an elaborate and able paper, by Dr. Kern, of Leipzig, from the *Allgemeine Zeitschrift*, which we present abridged.

"A glance at the strivings of the present time shows how public, national, and private institutions have proposed for themselves the aim of spreading a truly moral and religious education; inasmuch as the conviction has arisen and grown into a lively and active principle, that only an educated can be a happy and contented people. In order to begin the elevation and ennobling of the race at the source, there is at present scarcely to be found a village which does not contain one or more institutions for the care of children; and freely does the government or the public contribute to found new ones, and to place the old on a more effective footing.

"This care is not only extended to the general, but also to the special, wants of the community; so that those classes of our suffering fellow-creatures who, without special means and institutions for education, must remain neglected, have attracted active sympathy. Scarcely any city of the civilized world is at the present time without institutions for the care of the deaf and dumb and the blind; and in recent times the imbecile and idiots, hitherto supposed incapable of improvement, have been made the objects of a like care.

"It would be useless to inquire from whom the first proposal emanated for the education of these unfortunate classes; for whilst Director Saegart, of Berlin, in 1846, believed that he had demonstrated the curability of idiocy and imbecility, the endeavours of Seguin in Paris were directed to the same end; and even before Dr. Guggenbuhl opened his institution on the Abendberg, in Switzerland, Voisin in Paris had experienced very satisfactory results in the same department in 1836; even Voisin himself had predecessors. It is in this, as in so many branches of science and art—the same idea emanates synchronously,

and is followed out in various places, indicating that it is a necessity of the time.

Amongst those supported by government are that of Hubertsberg, in Saxony, those of Mariaberg and Winterbach, in Wurtemberg, and one in Sardinia. None else are known to me which are devoted to the care of idiots and imbeciles exclusively; but private institutions for the same purpose have sprung up, mushroom-like, everywhere. Unqualified persons have sought to take possession of this ground; yet such institutions as have been erected from mercenary motives have for the most part fallen to the ground, or are undergoing such a decline. Others interested in such projects have lost faith from these failures, and have conjectured that in a little time no one will entrust the afflicted child to such an institution. From my many years' work in this department, I am convinced that the endeavour to educate this unfortunate class will ever meet with more and more favour, provided that, on the one hand, too much is not *expected*, and, on the other, too much is not claimed as an aim. I am the more confirmed in this view by the results of a journey, taken for purposes of inquiry, which will be here detailed."

Dr. Kern proceeds first to speak of the meaning and relations of imbecility, cretinism, and idiocy. Defining imbecility to signify that condition of mind in which the "inner life-sphere" is not characterized by the capabilities of the sound mind, he inquires whether a normal psychical development has preceded this state. The argument concerning the propriety of the term "congenital" is long and elaborate. He states that we can with no more propriety speak of a truly congenital imbecility than of a truly congenital preparedness for all intellectual manifestation; that there is no doubt that the mind is not originally what we infer from the contemplation of educated men, a something prepared for this education from the beginning; but a result, a product of surrounding nature, animate and inanimate, of internal development, of external communion with previously existing intelligence, of fate, its author and guide. He considers, also, that the capacity of development, even to the highest grades of intellectual eminence, is an original right and possession of every viable child; that errors in intellectual as in moral training may enter as false elements in the mental structure, but that the *mind* cannot be originally diseased.

The question then arises when and whence the disorder originates which we speak of as congenital, a question truly, which in the concrete is most difficult of solution. Dr. Kern then sketches, at considerable length, the contest of the child's nature with the surrounding influences; and the various physiological changes which accompany the somatic development; also the varied circumstances as to care and hygiene, which in some cases assist, in others counteract the morbid influences—diet, poverty, and

neglect; as contrasted with cleanliness, vigilance, and well-directed treatment at critical periods. It is well illustrated by the consideration of the process of dentition, in which the functions generally are roused to a state of great activity; when there is a tendency to hyperæmia, especially in very vascular organs, such as the brain—aggravated perchance by pain, and by casual circumstances—passing on to inflammation, and formation of inflammatory products not perfectly absorbed. In one case, well-directed care may constantly meet and counteract these evil tendencies, and the child will pass over the critical period, with more or less safety, in the other, the results will manifest themselves in imperfect or morbid somatic and psychical development, which about the second or third year will begin more openly to show themselves.

“The skin is pale and withered, the muscular system is flabby, the cellular tissue lax; disproportions are manifested in the head, or extremities. Then we observe the long, or perhaps unnaturally wide face; the wrinkled forehead; the spiritless, often inflamed or squinting eye; the large, red, projecting ear, often with an offensive discharge; the thick lips, which yet can scarcely cover the irregular large teeth; the contracted or distorted thorax; the tumid belly. The child knows no refreshing sleep; it lies disturbed, or awakes with a cry; diarrhoea and obstinate constipation alternate; and the original muscular twitchings have developed into true cramp or convulsion. Unable to support the weight of the body, the child does not make the same exertions in locomotion that healthy children of the same age make. The phenomena of the external world pass without trace over him; no ray of joy enlivens the dull eye, no smile irradiates the fixed, pain-expressing countenance; no attempt at speech or articulate sound is made, or only a few words imperfectly learned, as necessary to the supply of the physical wants. Viewing this as a whole, we have a picture of the perfect scrofulous or rachitic diathesis, which through all relations of life will ever more and more become prominent. The development of this diathesis to the highest grades depends upon the intensity of the morbid processes and upon the external circumstances attendant upon it. The child which enjoys judicious care and treatment may survive happily enough the process, even although the tendency has been inherited strongly from generation to generation. On the other hand, the child, born and brought up amid misery and poverty, will sink into the above described condition, which, if placed in more favourable circumstances, would scarcely have manifested any, or only the mildest symptoms.”

Dr. Kern then proceeds further to illustrate the position that cretinism, whether sporadic or endemic, is a highly developed form of scrofulous or rachitic tendency; and that in the districts where it is endemic, the gradations are insensible from the mildest of those affections, to that which is truly reckoned cretinism. He shows that the prophylactic and hygienic re-

sources which are notoriously useful in the one class of affections, exercise the same favourable influence upon the other, and controverts with some asperity Dr. Guggenbuhl's theory as to the distinctness of these affections; first on general argumentative grounds, and next with regard to Dr. G.'s peculiar and individual notions.

"Further, Dr. Guggenbuhl draws a distinction between common idiocy or imbecility and cretinism, on the ground that the latter, once waked from the brain-slumber, before all things is accustomed to recognise the existence of a Deity, even before he comes to an understanding of surrounding objects—for instance, the table before him. Such are ideas to communicate to old women, but not to make scientifically available."*

Dr. Kern recognises some other causes of defective intelligence—pressure on the head, premature birth, difficult labour, certain forms of general disease, and excitements of particular parts of the peripheral nervous system, thymic asthma, whooping-cough, &c. And as the causes are various in the nature and intensity, so the results produced are so various as to elude classification; for whilst some are so slight as to differ but little from the healthy manifestations, there is every grade from this to that condition where there is scarcely a spark of soul to distinguish him from the beast. He afterwards notices how frequently the absence of all anatomical lesion is remarked in the most confirmed cases, both in general and microscopic examination; and then passes on to the different systems of recognition and treatment by their different men, or schools, SEGUIN in Paris, GUGGENBUHL in the Abendberg, and SÆGERT in Berlin.

"The fundamental views of these three men certainly differ materially. Dr. Guggenbuhl considers cretinism as an independent form of disease, expressing itself by bodily and mental crippling (*verkrüppelung*), congenital, or developed in infancy, up to the seventh year. His conviction that even children affected with, or having a tendency to, cretinism, may be normally developed if removed from the valleys to the mountains, has induced him to build his institution on the Abendberg. To cretinism Dr. Guggenbuhl opposes congenital imbecility and idiocy, as incurable."

* From Dr. Guggenbuhl's letter concerning the Abendberg:—"One day, as the setting sun gilded gloriously the evening sky, the noble spectacle attracted at once the attention of all the children of the establishment. Joy, astonishment, rapture, and wonder seized them all; and even F., a boy who hitherto had been shy and unsocial to friend or foe, indifferent to pleasure or pain, and *dumb*, called suddenly out, 'The sun!' The ice-rind of the soul was broken; he even spoke further to his companions, though his powers of conception were still so weak, that he could not distinguish between the fingers of his own hand."—It will be borne in mind that in all Dr. Kern's strictures upon Dr. Guggenbuhl, and the system of which he is the exponent, we merely quote.

"Seguin founds his hope of happy results in the treatment of imbecility on the fact, that even the flea may be educated or taught.

"Director Saegert lastly considers imbecility as a *condition*, not a *disease* of the mind; conditioned by a pause at a low grade of development, and proposes to attempt to take up the mind at that grade, and lead it forward intellectually *towards* if not *to* its normal condition."

No account is given by Dr. Kern of Seguin's method, and only a brief allusion is made to that of Saegert, further than to imply that his method of treatment is purely intellectual, and that the results are still unpublished. An extended notice of Dr. Guggenbuhl succeeds:—

"Dr. G. adopted another idea—he saw a cretin lie praying before a cross, and the thought struck him that he must be his saviour. He put his hand powerfully to the work, and diligently extended the rumour of his call throughout the world. Yet, indefatigable alike amongst the children and at his writing-desk, he appears neither to have suggested any new scientific aspect of these disorders, nor any new method of treatment.

"In my inaugural dissertation 'De Fatuitate, &c.,' I have expressed the opinion that I could not place implicit confidence in all Dr. G.'s published details; but it was long my wish to see him actually at work. Accordingly, on August 30, 1853, I visited the Abendberg, and was told, after an hour's delay, that Dr. G. was ill. After another long delay, I found the children assembled in a large room, which served for dwelling-place and school-room; it was provided with an organ, a Chinese drum, several forms of orthopedic apparatus, a running machine, and pictures of all kinds. The children were playing briskly; I took two by the hand, and said to the female attendant, 'These are the pikes in the carp-pond,' meaning the elements of life and health. She replied, 'These boys were very bad, they have cost us much trouble.' With this she looked so suspiciously at me, that I could scarcely conceal my displeasure, for I considered the boys healthy both in mind and body. Seeking to converse with the other children, I was prevented by various means—thus, if I spoke German, they were French children—if French, they were English; and getting a little German girl before me, I was told she never spoke when strangers were present!

"A boy showed me a copy-book, in which were sentences written in German and French; yet I found he could not tell the month, nor the day of the week, nor his age, nor birthday. For the rest, I found precisely the same forms of the affection as we have in Germany—brain affections, and imbecility resulting therefrom, in its higher or lower forms;—and rachitic and scrofulous diseases, mind and body thereby deteriorated.

"It was noon, and I left the institution, mounting the Abendberg. I expected to see the children come out to enjoy the glorious weather, but I looked in vain; only one was visible, swinging round and round a tree. The next day was bitterly cold; shivering, I visited again the institution, and found the children also blue and almost stiff with cold.

This day, accompanied by Dr. G. himself, I witnessed the process of education. About twenty children were taught by two female teachers—one for geography the other religion. The first sat before a map, pointing here and there with a rod—‘What is that?’—‘That is England,’ rung out the answer of the children: ‘What is this?’—‘That is Ireland, London, Dublin,’ &c. The second teacher had pictures representing Bible-history, which she explained, and repeated passages of Scripture concerning.”

Dr. Kern was very much dissatisfied with his visit, and gives details of several very important modifications to be made in the published statements concerning this institution. He disapproves strongly of speaking of the *cure* of idiocy, when such cure consists only in the ability to write out sentences from copies. Then follow brief notices of Dr. Erlenmeyer’s establishment in Bendorf, that of Dr. Zimmer at Mariaberg, and that at Winterbach, under the care of Dr. Müller. Of the care exercised over the children in these places, Dr. Kern speaks most highly, but seems to imply that he has not met with any *cures* in well-established cases:—

“Indeed, of *cures* of imbecility I believe we cannot find one credible case; for the accounts given by Dr. Saegert in the second part of his work are as imperfect as would be the account of a taliacotian operation at the moment of its completion; they go no further than to say of the children—‘They are in *course of* full development.’ This was in 1845, and if we inquire into the after progress, we have no data.”

If idiocy or imbecility dependent on organic mischief in the nervous centres be insusceptible of cure, an important inquiry suggests itself, as to whether all who appear imbecile or idiotic are thus, or in some degree organically diseased. Dr. Kern answers this in the negative. Development of mind is arrested or retarded in many cases by accidental circumstances, by lack of care or attention, by many attendants upon poverty and misery. Mind again is worn out by over-forcing early, as in infant prodigies. In neither of these classes can *disease* be correctly predicated. Hereditary weakness of frame in a child may lead to extremely slow development, merely from inertia; and may strongly simulate imbecility. All these and many allied cases are favourable for an attempt at cure. After enumerating certain diseases which often are attended by mental imbecility, Dr. Kern makes some interesting observations upon the effect of the organs of sense upon the intelligence:—

“The organs of sense are the media through which those parts of the brain concerned in mental life receive their stimulus. If these be imperfect, so will the psychical development be imperfect, as we see in the deaf and blind, and the bodily organs themselves will be backward in development, as a consequence of their inactivity; as, on the other

hand, the use of any of the senses causes a fuller development of its corresponding nerve. Cases are not rare where, for instance, scrofulous children, from their earliest infancy, are so affected with ophthalmia or otitis, that they receive nothing but painful impressions from the external world. Here we should expect an abnormal condition of mind to result, without supposing that the brain itself must necessarily be affected."

One of the most important practical points dwelt upon by Dr. Kern is, the personal care of these afflicted children, as to diet, cleanliness, &c. He speaks of alternating diarrhoea and constipation, not so much as the result of even functional affections of the bowels, as arising from neglect of systematic evacuations, whereby the bowels become loaded, till an effort of nature compels attention. The same is the case with the bladder, whence most frequently results the wetting of the bed. Long confinement to bed he considers a very frequent cause of onanism, from mere lack of employment for the hands. The cure of these evils, he thinks, is to be sought in perpetual watchfulness, night and day, and in systematic periodic relief to the bowels and bladder—in the one case, bad habits will be broken, and in the other, forgotten.

In instruction, Dr. Kern has the greatest faith in familiarizing the children, not with pictures and diagrams, but with the use and nature of common things, such as everywhere surround them; so that if the mental affection be really incurable, the body may be trained to some degree of order and utility.

The paper concludes with a forcible representation of how much may really be accomplished in this department, and a strong appeal to those interested in the subject to persevere.

Dr. Müller himself gives an account of his institution at Winterbach, in his sixth annual report. Prominent features in his system are cold-water baths, "Swedish gymnastics," and the administration of sulphur, in minute doses. The children are divided into three classes, each having a separate teacher. The first includes about 20 children, from whom we are told several are selected every year as adapted for certain callings in life. The second class contains about 17, and the third the remainder. The entire number is 37 boys, and 29 girls. The deaf and dumb are not now admitted, but sent to a separate establishment. The diseases chiefly prevalent amongst them are typhus fever, hooping-cough, dysentery, and tuberculous affections.

The peculiar part of Dr. Müller's report is that which treats of the origin of cretinism and allied affections. He attributes it to *marsh-miasma*, which when acting "*intensively*," produces intermittents; but acting slowly and gradually as a poison, produces cretinism, goître, and the deaf and dumb condition. As these affections, however, occur endemically, when the cited

cause does not exist the author had recourse to a theory which, Dr. Erlenmeyer very justly remarks, removes all such difficulties—viz., that the miasm can be conveyed any distance as mist. Besides this, there are secondary causes which are recognised as having some influence, as the drinking of brandy, bad diet, want of cleanliness, moral and mental neglect, damp dark dwellings, hereditary affections, &c. &c. His prophylactic measures are in accordance with the above theory.

Herr Gläsche, the principal teacher of the institution for imbecile children at Hubertsberg, gives some account of the method in use, and the results. It was opened in 1846, but placed on a more definite and extended footing in 1850. Dr. Erlenmeyer, commenting upon the *method*, observes that in this as in most others, there is one prominent defect—viz., that of attempting the instruction of the children either as if they were of sound mind, or as if they were deaf and dumb; in the latter case using too much pantomime and pictorial illustration, and in some measure neglecting the very important road to the intellect through the ear.

Since the opening of the establishment, 45 children have been received—30 remain under care; 2 have died; 6 have been removed either to other similar institutions or taken home; 7 have been discharged as competent to perform certain functions in public life.

Dr. Erlenmeyer, one of the accomplished and laborious editors of the *Correspondenz Blatt*, gives an account in that journal of the recent opening of the “School for Idiots” at the Hague. As at his visit the establishment had only been open three months, much progress was not to be expected; but there were twelve boys and ten girls, in five classes, the upper three having each a male, and the other two each a female teacher. He was much and agreeably surprised with the order and system already introduced, and with the exactness and unity of energy with which the plans were carried out. He speaks with great praise of the *oral* instruction, and mentions incidentally how frequently it is the case that children of the class for whom these institutions are intended are susceptible in no common degree to the influence of sounds, rhythmical or musical—an important hint as to education. Of details it was still too early to speak. The establishment is intended for *curable* cases—those suffering from actual insanity, from epilepsy, or other incurable affections, are not admitted. Young children are preferred; but they are received up to the age of twenty-five years if any hope of amendment is perceived. The treatment is somatic and mental—gymnastics, music, singing, speaking, reading, writing, and reckoning; lastly, simple forms of manual labour. When they

are sufficiently advanced to be fit for an ordinary school, the mission of this institution is complete. They are discharged under these conditions: when they are twenty-eight years old, or when they have been five years without making progress; when the state of health is such as to make their further continuance there either hurtful to themselves or to the other children; finally, when all hope of improvement is given up.

Dr. Erlenmeyer, approving most highly of this school, suggests two points especially where improvement is desirable. The first is as to the situation of the building; it ought not to be in a town, but in the country; the countless canals, the evaporation, the scarcity of pure drinking water, render the town inexpedient. The neighbourhood of the sea, and a rural district, are very important. The second point is the necessity of a resident superintendent physician in all such establishments. This is enforced by many strong arguments.

In an interesting account of the asylum for idiots at Mariaberg, by Dr. Zimmer, there are the following remarks:—

“All the children in whom imbecility or stupidity is prominent show also bodily defect or disproportion. In the most favourable cases there is generally some smallness of the body, looseness of conformation of the limbs, shuffling gait, disproportion of head (either too small or too large), low forehead, flattened occiput, dull eye, open slavering mouth, &c. A natural classification of the inhabitants of this institution (about seventy in number) would be as follows:—

A. ENTIRE CRETINS.

I. *Motionless.*

Body small—brain atrophied—extremities useless or palsied, sensation defective and dull—dumbness—difficult digestion. Mere vegetation; defective consciousness—lethargy and sleeplessness—catalepsy and epilepsy.

II. *Locomotive* (automatic).

Brain atrophy or hydrocephalus—automatic motions—dullness of senses. Animal (and musical) sounds. Greediness, instinct. Simplest form of comprehension—caprice—epilepsy.

III. *Restless.*

Brain atrophy or hydrocephalus—constant unrest—stammering or dumbness—unnatural appetite—sexual excitability—self-consciousness—passion, destructiveness. Ear for music—tendency to mania.

B. HALF CRETINS.

Some fitness for improvement—some mechanical and spiritual tendencies—some powers of thought and speech.

These again are divided into—

IV. The torpid or clumsy form, and

V. The agile, or useful (*brauchbare*).

This latter approaching in many particulars to a healthy form of development.

"In order to form a *prognosis*, it is above all necessary to remark the bodily condition. When there is defect of brain, there is scarcely ever much improvement to be looked for. A criterion of this is afforded by measurement of the head. Dr. Erlenmeyer first pointed out that where the sum of the diameters (in length, breadth, and depth) of the head amounted to less than the circumference, there was defect of the brain. The complication with well defined insanity (*geistesverwirrung*) is very unfavourable as to prognosis. So also is epilepsy. The more the mass of the head preserves its relation to the mass of the body—the more the anterior part of the brain is developed—the younger the child—by so much the more a favourable result is to be anticipated. In such cases, paralysis of the extremities, or displacement of the bones of the skull or face, is not of very serious import."

The arrangements of this institution, both as to personal care and supervision, hygiene, therapeutics, and instruction, seem to be most excellent; but our limits forbid further details.

Not remotely connected with this subject we remark some interesting statistics on the *inheritance* of cretinism and deaf-dumbness, by Dr. Meyer-Ahrens, of Zurich, in the *Correspondenz Blatt* for the 28th of February last. We will arrange his results in a tabular form. Out of 765 cases in which cretinism in some form was observed in families, the parents, one or both, were affected as follows:—

The first column gives the nature of the affection; the second the number of cases in which the father only was affected; the third the same with reference to the mother alone; and the fourth the number where both were so.

	F.	M.	Both.
Imbecile	1 ...	4 ...	1
Simple or weak	7 ...	6 ...	10
Religious mania	1 ...	0 ...	0
Low form of cretinism	0 ...	3 ...	6
Melancholy	0 ...	3 ...	0
Hypochondria	1 ...	0 ...	0
Impediment of speech	0 ...	2 ...	0
Deafness	2 ...	0 ...	0
Scrofula	3 ...	1 ...	3
Paralysis	0 ...	1 ...	0
Sickly	0 ...	3 ...	0
Epileptic	1 ...	0 ...	0
Deformed	2 ...	2 ...	2
Dwarfish	0 ...	0 ...	0
Drunkards	12 ...	2 ...	3
Healthy and intelligent	0 ...	2 ...	179

In 35 of the above cases other brothers and sisters were cretinous.

In eleven cases of deaf-dumbness, one had a feeble mother;

six had both parents cripples ; one had a father and another a mother goitrous ; two only had both parents healthy.

It appears from other tables, that the line of inheritance is from father to daughter, and from mother to son, very much more frequently than conversely. Thus, in one series of cases, the disease was inherited from the father by the son 7 times, and by the daughter 17 times ; whilst it descended from the mother upon the son 17 times, and upon the daughter only 6. In another series the proportions were—father to son 6 times, to daughter 13—mother to son 12 times, to daughter 4.

There are several papers in the *Zeitschrift* which well merit an abstract, did space permit ; we must be content to enumerate the most important. Dr. Nitzsch gives an able and interesting account of the state of psychiatry past and present in Egypt, from which it appears that although much has been done of late years, there remain many relics of ancient barbarism, from the times when maniacs were viewed as little more than wild beasts. Dr. Esmarck and Dr. W. Jessen, relate some cases illustrative (though according to their own views not conclusively so) of the connexion in many cases between syphilis and insanity. Dr. Brosius has two interesting papers, one upon the "Mechanism of Sensation," and the other upon the "Speech of the Insane" viewed as a diagnostic sign. Perhaps at some future time we may be able to give an analysis of these able contributions.

ART. VI.—ON THE COMPENSATORY RELATIONS BETWEEN THE FACULTIES OF ORDER AND MEMORY.

BY A. F. MAYO, ESQ., BARRISTER-AT-LAW.

I THINK it may be shown that Order and Memory, regarded as separate and independent faculties of the mind, stand related to each other as compensating faculties ; in other words, that a deficiency in either of these faculties can, in some degree, be supplied by the other faculty.

In the first place, I will inquire how the presence of Memory compensates for the absence of Order, both being regarded on this occasion as independent faculties of the mind.

Memory involves the power of retaining or fixing for permanent use the ideas which, from any cause, whether internal or external to the mind, occur to the mind. It may seem strange that Memory, which from the abundance of the wealth which it enables the mind to conserve and store up for future use, might seem, more than all the other faculties of the mind, to require the assistance of Order, steward-like, to arrange its accumulations,

should have a facility of its own in dispensing with the assistance of Order. Yet that it is so, I think I shall show my reader.

The one great difficulty in giving harmony to the ideas which we derive from so many sources, arises from the associations and prejudices which cling to the ideas. Thus, what the ideas gain in bulk and thickness they lose in delicacy and clearness of outline. Each new idea which we form has, in proportion to its novelty, a cloud of associations attaching themselves to it, the result often of the casual circumstances of the moment at which it was impressed. These associations, while they tend to amplify the scope and dignity of the new idea which we have gained on one subject, in the same proportion tend to the disparagement of our former ideas on the same subject. Here the faculty of Order, if present in strength, would insist on showing the symmetry and bearing of our new ideas; in other words, would harmonize our new knowledge with our old ideas, and thus with our old knowledge.

But if the faculty of Order is weak, and that of Memory strong, the mind, instinctively tending to consolidate its footing, will summon instinctively Memory to its aid, which, under the mere laws of association, will bring to our consciousness hosts of old ideas, which will modify the new ones, and deprive them of their arrogant claim to enthrall the attention.

The old idea thus becoming associated with the new idea, will, by the aid of Comparison, immediately become the measure of the new idea; and thus also Causality will often exert its function to show the essential moving principle common both to our new and old ideas.

Nor to produce this effect need we suppose the faculties of Comparison and Causality strongly developed. For the brightness of the images which a strong Memory reproduces makes their critical function an easy one. Thus the mental idols (in the sense of Lord Bacon) which are stamped on the mind by the passions, the pursuits, and the other individualities of each man, and which so often intrude on the mind when excited by the orgasm of a novel conception, are, by the aid of Memory, coolly brought face to face with our antecedent knowledge, and often will retire abashed.

This effect is often produced by the merest juxtaposition, independent of any visible exercise of Comparison and Causality. In this way the new idea is controlled by the memory of past ones, and being divested of its superfluous attire, is ready for inscription in those mental tablets for the registration of particulars, on the basis of which alone all sound inquiries must be conducted. The new idea is like an obtrusive home-boy, who, placed in a public school, at once loses his offensive impertinence under the mere pressure of numbers, producing a constant abrasion of the edges of individual minds. The remembered

ideas will also confer upon the new one the polish of uniformity, and if detracting in some respect from its picturesqueness, will give more than an equivalent in adding to its usefulness. Where, however, the power of memory is deficient, but is nevertheless invoked, a confused idea is the probable result, from which the thinker recoiling falls back upon his new idea. Otherwise the confusion in the recollection of former ideas is propagated into the new idea itself. Suppose a man to have presented to him a new tenet of morality, which chimes in with his prepossessions. If he cannot recollect any analogous cases except very feebly, he would do better to apply to the faculty of Order to test the general reasonableness of the doctrine, than to endanger it by specific yet untrustworthy analogies.

Minds with a strong passion for truth, and only choosing to recognise ideas which are distinct, will, in such a case, discard the incumbrance of imperfect recollections. Without the aid of Memory, the mind depending on mere association could never rely on its own capacity to summon up a group of past ideas which should be united together with any closeness of adhesion; hence, minds which have to deal with new ideas, in their careflessness not to impair their clear and vigorous reality by the shadowy forms of dimly remembered past ones, will, in their defect of Memory, be disposed to ignore, not simply their forgotten ideas, but all that general result of such forgotten ideas which express their sum and substance in the convictions of the present: while others, by reason of the same defect of Memory, habitually check the fine elasticity of their intellect, restraining it, as huntsmen do their greyhounds in a leash, in fear lest, in giving way to such elasticity of mind, they may compromise truths which are in fact forgotten, or mitigate their authority if they should be recalled to the mind in future. They do this from an instinctive apprehension that the possession of a mind by a new idea may make the retracing of a former idea on some subject so much the more difficult, unless it can be renewed by force of contrast. On the other hand, suppose that a man's memory is strong, and that he has under a flexible command a large army of acquired ideas and facts; we shall generally observe that he can place them in a rough sort of order, however destitute of method his mind may otherwise appear to be. The memory of a Lyndhurst or Macaulay will present them with visions so bright in colour, so clear in outline, so girt with all the moving lineaments of the life which they possessed when they were first mirrored from their object upon the mental sensorium, that the task of Order in allotting them a collocation will be small; and this on the same principle that while the most adroit captain called on to marshal his battalion in perfect darkness would assuredly fail, they would be

nowhere, as are the ideas of the past to him who has forgotten them: but pour the light of day on the battalion, and then a school-girl might arrange them with some pretence of symmetry.

All large masses of ideas, like all large masses of men, necessitate by their very presence, a rough sort of Order to prevent them from jostling and crowding each other. The man in the crowd must have standing room. He must also adjust his position in some harmony with that of his neighbour. So an idea, by virtue of its being remembered, must have some clearness of outline, and in proportion to this *last*, which is made up partly of the strength of the impression and partly of the strength of the memory, has it a facility for coming into accordance with other ideas.

That the faculty of Order should compensate for the absence of Memory seems a corollary from the above remarks. I can make it more evident. The faculty of Order places ideas in certain synthetic relations to each other. These synthetic (universal) relations must have a connecting link. This link is obtained by the faculty of Order. Order therefore has a sympathy with the design or ultimate object of any course of action, and similarly with the general tendency of a collection of facts. It does not so much investigate their separate truth or qualities; but, assuming these as proved, strives to obtain their general harmony and result. It performs the functions of a gardener who surrounds his younglings with a fence, or places them within an iron frame. Besides this, the faculty of Order provisionally tickets each new idea which it encounters according to certain preconceived generalizations. Thus, to the struggling infancy of the idea of which Comparison and Causality have been the inventors, Order offers a home and shelter under the bosom of recognised and admitted truth. In this way, Order defends the delicate speculations of the analytic faculties from a premature destruction. Those who do not recollect that without speculation unverified in the first instance the laws of no single science could ever have been discovered, love to nip in the bud the luciferous speculations of even undoubted genius. This perverse hatred of generalization and dislike of innovation which beset common minds, are soothed into neutrality by the intervention of the faculty of Order, when it squares and cunningly adapts that which is as yet an unverified speculation to an agreement with recognised laws. Yet does not this take place without danger from those anticipations of truth which the verification of after inquiry does not always confirm. If, however, the provisional generalizations are well remembered to be only tentative guesses at truth, to be subjected to the probation of inquiry, the gain is all on the side of truth.

We have seen that Memory recalls former ideas in a freshness and beauty which is even purified by the lapse of time, and modifies our admiration for the most recent child of our thought by the juxtaposition of our former knowledge.

This result Order effects, but in an inverse manner. While the man of strong memory gives full swing to the associations caused by the idea before him, however prurient they may be, in order that the images of the past catching fire should appear in brightness, the man strongly gifted with Order lops off the associations which ivy-like conceal the symmetry of the new idea and its analogies with old ideas, or he packs it up in the shape in which it is most portable, and in which it may be most conveniently laid alongside of old ideas. With a man, then, of strong memory, the arrogance of the new idea is chastened by the recollection of ancient facts; with a man strongly endued with order it is chastened by a reference to established laws.

While Comparison may be said to estimate and observe the rough lineaments of phenomena, and the varieties and difference of the surface of things, and while Causality penetrates into the hidden essence of things, thus confining itself within a narrower area than Comparison, but digging to a greater depth, Order takes a further sweep than either into the expanse of Nature. Akin to Comparison in its love of extent of observation and to Causality in its love of boldness of theory, it carries both further than Comparison and Causality respectively. In its love for catching at large general laws and combinations, and for observing the mutual action of such laws and the general harmony of the universe, it stands alone. Its danger lies in its soaring spirit, in its despising the ground, when it can find symmetry and beauty in ideal realms. Its strength lies in the firmness of its alliance with the two sister faculties, Comparison and Causality, and while it plumes itself as being a pioneer in mental inquiry, as well as an ultimate refiner and purifier of mental wealth already acquired, it is bound not to forget those stern delvers in the search for knowledge, who dealing at first hand with Nature, sustain the heaviest burden. Order has a speculative bearing, in the extent of its telescopic sweep over the realm of nature. It has a practical bearing in its showing the co-operation in action of various coefficients.

Comparison and Causality, often too much occupied in an intense regard of objects, with a view to nothing further than their separate natures, forget occasionally as well their practical, as their theoretic value. I mention all this to indicate with what a strength of grasp the faculty of Order co-ordinates or views, in general relations, the facts and ideas of nature. It may be asked, in what way this faculty disposes of those superfluities

of separate objects which it is compelled to elide that their facilities of combination may become visible? It does not throw them away; they, too, may be ticketed by Order, and provisionally bracketed with similar residuary facts.

Each new fact or idea may thus be made a probationary member of a system, from which however it must be displaced if further inquiry, by Comparison and Causality, should show its collocation to be founded in error. Even pure association, when the mind is not conscious of any exertion, but allows the panorama of the past to move silently before it, is often subjected to the latent influence of Order. The full explanation of the laws connecting Association with this faculty more than with the other faculties of the mind, I must reserve to another occasion. Even at first sight it cannot surprise us that the mental system should be largely indebted to the faculty of Order as a physician to remedy the morbid action of Association. Frequently, without exciting our notice, the faculty of Order will step in among the associations, and while leaving them their outward form and gesture, will reduce the stragglers to some provisional discipline; or if any idea imbedded amid our associations is painful or turbulent, will eject it as summarily as a policeman an offender out of a crowd. So gentle is the action of Order, that it often introduces quiescence into the utmost turmoil of the mind, without any recognition of its presence.

In addition, then, to the function of Order exercised after Comparison and Causality, in giving breadth and generality to the conceptions of the mind, it has also a function antecedent to the ordinary action of the above faculties. In both cases by introducing a logical connexion over a large surface of facts or ideas, it tends to render them indelible in the mind, and so far usurps the proper functions of Memory. For it must be recollected that the corrosive element which chiefly destroys mental impressions is vagueness. Now, vagueness is caused either by excess of Association, implying the absence of intellect, or by the excess of intellectual action (chiefly characterized by Comparison and Causality), implying the absence of Association.

The conchologist minutely inspecting (*id est* comparing) the colours of a shell, may, in the very intensity of his gaze, miss his purpose of seeing definite outlines, by over eagerness. And the crystallographist, bending over the problem of the law of crystals, and using all his Causality to explore it, may defeat his purpose by not co-ordinating the laws of other sciences (such as mathematics) as assistants in his inquiry. In both such cases Order comes in to relieve the mind from its speciality of aim, and, by widening the prospect, to give security to our explorations. Order loves to place the inquirer upon the highest

peak, from whence he may command the largest area of facts. And those gifted with this faculty are safe, if they remember that the surveyor, descending the mountain after his trigonometrical survey, has to fill it up in the most submissive reference to the meanest turnpike road in the valley. Yet, for the simple purpose of the retention in the mind of the features of the country, even though he did not follow it up, the traveller would find himself repaid. And with results equally happy will a man, deficient in the special faculty of Memory, introduce his faculty of Order to forge links, however artificial, among his ideas, by which each one will always have a rational bond of connexion with the rest.

By the use of the word artificial, I intend that it is most important for us not to confound the two occasions on which Order is called forth, the one early, the other late, in philosophical inquiry. Order, indeed, waits till a firm and solid foundation is laid before it ventures to rear its massive buttresses on high; but like a good architect, it is ever ready to assist its masons—Comparison and Causality—with a provisional scaffolding. From considering the work of Order, whether evinced in provisional generalizations or in the establishment of verified laws, we may estimate how powerfully it compensates for the absence of Memory. If, indeed, Order cannot, like Memory, reproduce and revivify past associations and past forms, it can at least refer to its own work—those artistic combinations with which Order is ever clothing the nakedness of Fact.

On the one hand, the dominion of Memory over former facts is pure and simple. For whenever the simple succession of ideas, in their order of coming before the mind, is so indelibly impressed on the mind as to be capable of being recalled at will, either individually or in combination, THERE IS Memory. On the other hand, the dominion of Order over facts (represented of course by ideas), is over facts transmitted into, or forming a part of, generalizations, each portion of which involves the judicial action of the mind, and if remembered is remembered only in consequence of the impression produced on the mind by *mental acts*.

In conclusion, of the two faculties, Order and Memory, Order has, perhaps, the more dignity, as possessing most affinity with the other faculties concerned in inquiries after truth. But Memory seems to satisfy a more general necessity of the mind. Besides, Memory seems more independent of Order than Order is of Memory; for there must always be a moment of time during which we are compelled to retain a fact before any of the faculties which give the fact a philosophic shape can be used upon it; and this must be done by Memory, which can act "*sponte suâ*," and recal facts linked together by no bond; for to call mere

succession a bond would be to assume the point in question. To the other compensation which Memory offers for want of Order, I will add, that Memory gives opportunity for the repeated examination of past facts or ideas, and can introduce, by the clearness of the images which it reproduces, the faculties of Comparison and Causality to give the last finish to the *details* which otherwise the faculty of Order would have given to the *whole*. On the other hand, Order compensates for the absence of Memory by suggesting new postures and assortments of old ideas, thus enabling the analytic action of Comparison and Causality to be applied from a new point of view. Thus some equality in the balance of results is produced.

Perhaps the majority of men would get on better if devoid of the assistance of Order, than if devoid of the assistance of Memory. For Order principally looks to large generalizations, which, from the nature of the case must be few as compared with the minute and practical details which, whether in speculation or action, it is left for the mass of mankind to carry out, in obedience to the expansive laws which genius discovers. For the details of action and of thought, habit produces the same facilities which, in large and expansive speculations, are achieved by a sense of Order and of Harmony. And we may note another divergence; that by the action of habit too prolonged men's minds become dead and automatic, and that by the action of the faculty of Order over-exercised the stability of the mind is imperilled by the vastness of the ideal landscape which it discloses.

To the mass of mankind Memory is of priceless importance. For no extrinsic aid could supply the void and uncertainty caused by the forgetfulness of particulars on which the safety of action mainly rests. On the other hand, to the philosopher a deficiency in his faculty of Order would be a far greater evil than a deficiency in his faculty of Memory.

For in the establishment of large and fruitful generalizations, the theory must long beforehand have been silently yet surely maturing from a constant verification of its various steps by reference to particular cases; and it is assumed that the processes of the intellect do stereotype themselves on the mind with a force which requires no assistance of Memory, which is chiefly required for those ideas between which there is no link forged by the intellect. Memory in general is chiefly applicable to those innumerable chains of facts and of ideas, between which we can discover no necessary connexion, but which we have to retain in the mind in combination as if they were necessarily connected.

What particulars, therefore, the philosopher needs, his faculty of Order would always point out, by description sufficient for him whose knowledge Order has arranged in marked receptacles, to

which he may always refer. The whole of literature and science, as stored in books, act in fact as Memory to a philosopher gifted with the faculty of Order and who has duly exerted it. But if, on the other hand, the philosopher is strong in the accumulations which Memory heaps up of facts, but is deficient in the faculty of Order, then indeed rich in the raw material of knowledge he may be, but he will be skillless in that wisdom which can inspire dead matter with life and beauty; the diamonds may glitter in the sand, but where will be the hand which can arrange them in sparkling brilliancy around the coronet?

ART. VII.—STATE OF LUNACY IN IRELAND.

THE Eighth Report of the "District, Criminal, and Private Lunatic Asylums in Ireland" for 1857, presented by the Commissioners to the Houses of Parliament, has been forwarded to us through the politeness of Dr. Nugent, who, owing to the illness of his colleague, Dr. White, has almost the sole responsibility of this Report. It is most ably and comprehensively constructed, and contains matter of the deepest interest, not only in relation to the state of lunacy and lunatics in Ireland; but as suggestive of many valuable considerations in reference to the relations which unsoundness of mind bears to the administration of justice in general; as also many other topics bearing directly upon the great social questions which are now attracting much attention, chiefly as to criminal responsibility—education, secular and religious—domestic life, &c. A more favourable contrast can scarcely be imagined, than is presented between the aspect of lunacy in general, as treated of in this Report, and that which has recently excited so much and so indignant comment as existing in a sister country. We purpose to condense the substance of this document, so as to give a full view of the important matters treated upon.

In March, 1855, there were in Ireland of lunatics, idiots, and epileptics, 13,493, of whom 6263 were under official supervision in asylums, public or private, gaols and poor-houses. In March, 1857, the number was 14,141 altogether; of whom 6520 only were located in public or private institutions. In both cases, above half the entire number were at large, and are described by Dr. Nugent as "being possessed of means of their own, supported by their friends, or wandering from place to place, depending for a precarious subsistence on the charity of individuals."

This seems to be a considerable proportion of the insane to be at large. In examining into the causes, it would appear that

notwithstanding the very large outlay which has been expended in the erection of district asylums in the various counties, the accommodation is still very far below the requirements; and as will shortly appear, the number confined in private establishments bears an extremely small proportion to the total. Altogether, upwards of 600,000*l.* has been expended for these purposes, "including land, buildings, furniture, and fittings;" yet there is accommodation in these buildings for only 4337 persons. In March, 1857, there were 3856 patients in these establishments, leaving only 481 beds unoccupied throughout the country; not a large margin for contingencies, it must be acknowledged. Some of the largest houses, as that at Richmond, had only three or four vacant; by no means sufficient for the constantly expected additions, and the uncertain discharges.

Looking at the entire numbers of lunatics, &c., quoted by Dr. Nugent, as at present existing in Ireland, we are somewhat surprised at the low amount. In England and France the average number of persons of unsound mind, including epileptics, &c., is about 2 in every 1000.* If we calculate upon the same proportion for Ireland, the number of lunatics in 1855 would only account for a population of 6,746,500—certainly below the real number. Whether lunacy be actually less in Ireland than in our own country, or whether there may not be some unexplained deficiency in the returns, we are not prepared to say. As to the accuracy of the information, Dr. Nugent observes, speaking of the lunatics that are not under official surveillance:—

"Of these latter we have again obtained very valuable returns through the constabulary, and from the extensive distribution of that efficient force throughout the country, combined with the careful manner in which the returns have been prepared, we think the information may be relied upon as accurate, the more so as we improved on the forms previously used, having now got the name, age, address, and religion, of every individual in Ireland, whether lunatic, idiot, or simply epileptic."

The number of epileptics is 2171, concerning whom the Report observes—"We do not mean to say that supervision is generally required, for save during the temporary attacks of a paroxysm, they are for the most part perfectly competent to take care of themselves."

With regard to those under treatment during the two years embraced in this Report, the recoveries were 17 per cent., and the *relieved* 11½ per cent.

"The mortality, 9 per cent., is just one below that of the preceding biennial period; and when the proportion of unpromising cases brought

* On the authority of MM. Lélut and Tardieu.

from prisons is taken into account, these facts speak most favourably of the successful issue of Irish asylums. No epidemic of any kind has visited them since June, 1853, when we had occasion to refer to an increased number of deaths at Belfast and elsewhere from cholera. The mortality is now, for the most part, referable to affections of the brain and nervous system, or to diseases associated with organic debility, but particularly of the lungs, and ending in consumption. Two cases were suicidal; the first occurred at Belfast, in 1856, a male patient accomplishing his object by suspending himself from the ventilator in one of the single sleeping rooms. The second was at the Richmond, where a patient strangled himself at night with a sheet taken from his bed, which he tore up for the purpose. The coroner was called in on both cases, and it appeared on inquiry that neither of the lunatics had ever evinced dangerous tendencies, nor had the physicians or immediate attendants any suspicion that they meditated self-destruction. These, with another instance in which an old man was suffocated whilst eating, were the only casualties of a fatal nature which occurred during the period embraced in this Report."

As to the treatment generally adopted in the district asylums, it does not appear that there is any special course adopted, except in recent cases, or when marked symptoms require it in those of older standing. "Air, regimen, exercise, with the removal of causes leading to excitement, being more favourably regarded as tending to a beneficial result, in the alleviation of a malady, as yet but imperfectly understood."

On the subject of mechanical restraint, queries were addressed to the managers of the district asylums, and the result is as follows:—

"With reference to physical coercion, or mechanical restraint, in the majority of asylums it is employed in a mitigated form, in the others it is seldom or never had recourse to. On this mooted subject we do not interfere, unless, as has occasionally happened on inspection, we considered that the appliances might be partially if not altogether discontinued. The question is one more properly for the judgment of the local medical superintendents, and as we believe they are alike influenced by the most humane motives and a desire to do what is best for the safety of their patients, we would deem it unadvisable on our part to lay down any fixed rule on a system which is at issue between enlightened practitioners, and which, further, there is no authority to enforce. In our opinion, however, one most urgent and almost insurmountable objection exists to mechanical restraint, and which arises from the contingency of its being surreptitiously employed by attendants, to avoid trouble, unless due precautions are taken by the resident physician or manager."

The remarks upon religious ministrations and education appear to us of sufficient importance to quote at length:—

"With reference to religious ministrations—a subject which, unfortunately, has given rise, within the last three or four years, to a marked

difference of opinion between the executive and the governors of a northern asylum, the majority of whom, actuated, no doubt, by the sincerest motives, successfully opposed the admission of officially appointed chaplains—our sentiments, far from undergoing any change, have been strengthened by daily experience. We have specially directed ourselves to the points at issue, personally attending in asylums, at the respective hours of public worship, questioning patients themselves, inquiring both of officers and attendants, and noting the results at the moment; and we cannot arrive at any other conclusion, than that the regular visitations of chaplains, and the due performance of divine worship, should not be denied to the inmates of public institutions for the insane; for apart from other and higher considerations, the soothing influence of religion, as tending to the establishment of a self-control, however temporary in its nature, cannot but be valuable in a curative point of view; and it should not be forgotten that, though in one individual the reasoning powers are normally affected, the sentiments may remain unchanged, whilst in another, the moral feelings may be deranged, at the same time that the intellectual faculties are comparatively unimpaired—both cases being alike susceptible of the benefits of religion.

“We have made an analysis of the state of education of the insane in poorhouses and asylums. In the former, it appears there are 323 more or less educated, and 1476 illiterate; in the latter, the numbers are 2353 with some degree of education, against 1505 totally ignorant. The proportion of literate to illiterate in the general population of this country is fifty-three per cent. If we restrict the comparison to those in asylums, omitting the inmates in poorhouses, of whom a large majority are idiots, it would appear that education is in a much higher ratio among lunatics than in the community at large—a circumstance indicative of the fact that insanity, even among the humbler classes, is connected with intellectual development. At the Richmond, a school was established about six years ago, principally for females of weak mind, and though not likely to be followed by any permanent result, has at least the merit of a benevolent intention, and tends to vary the daily occupations. We would therefore wish to see the example of the Richmond governors adopted in other establishments, and also a more liberal supply of some cheap periodicals afforded.”

With reference to the opinion here expressed, that insanity is connected with intellectual development, it may be well to examine with some care into the statistics, though this is not the place to enter into the question fully. Out of 3856 patients under treatment in the district asylums in March, 1857, 236 are reported as “well educated;” 516 can read and write “well;” 821 can read and write “indifferently;” 778 can read only; 1505 cannot read. It may be urged and granted that intellectual development is not always in strict proportion with education; but if we judge from these figures alone, they would scarcely appear to support very strongly the view here taken.

On the causes of insanity, Dr. Nugent thus writes:—

“Hereditary predisposition and intemperance would seem to be the two great feeders, if the term may be used, to lunatic asylums. In an aggregate of 3856 individuals, on the 31st March, we find of the 2146, where causes are assigned, no less than 997 under these denominations, 506 of the former, 491 of the latter, or forty-six per cent. As regards the cases where we had no definite information—and these are constituted, for the most part, of transferences from gaols—it is legitimate to conclude that the same proportion as in the assignable exists. Hence of the whole population in asylums, 1790 come within the two categories. This fact alone, pregnant of serious considerations, speaks for itself, and needs no comment on our part.

“Under the head of exciting causes to insanity, religion is enumerated; but considering the great influence which it exercises over the conduct of mankind, not alone for good, but unfortunately too, from a misconception of its true spirit, imbuing whole communities occasionally with a disposition to commit the wildest acts from the most unreasonable motives, it does not seem to be so powerful an agent in producing individual mental derangement as might be at first supposed. Lunatics will, no doubt, readily adopt, and as quickly abandon, extravagant ideas on religious as on other subjects, whilst the really exciting causes will be found totally unconnected with them. We find among clergymen and the members of pious associations more perhaps than an average per centage of lunacy; but their delusions rarely refer to their previous avocations, an observation alike pertinent to the insane members of other professions. Love, from misplaced affections and disappointed hopes, is a much more fertile source of the disease, particularly among the female sex, who, from their habits and sensibilities, are more susceptible than men of those influences recognised under the designation of moral.”

On the increase of insanity, Dr. Nugent makes allowance for the increased facilities for detection and enumeration as augmenting the annual returns; but at the same time—

“The important truth must not be overlooked, that from each individual case of lunacy, germs of disease, to be developed at a future period, possibly in a third or fourth generation, may be produced; for such is our organization, that the mind no less than the body partakes of inherent and hereditary peculiarities, which, as your Excellency is aware, rendering nations at large distinguishable by corporeal prowess, valour, progression in the arts, &c., or the reverse, first find their way into the smaller circles of which those nations are composed.

“ ‘ Quia multa modis primordia multis
Mista suo celant in corpore sæpe parentes
Quæ patribus patres tradunt a stirpe profecta. ’ ”

The Commissioners consider that on the whole the district asylums of Ireland have been successful, both in a curative and protective point of view; that they are well managed, and that the domestic arrangements are generally good, though perhaps

inferior to many of the English, still more to *some* of the French asylums.

“Generally speaking, a deficiency of furniture, and with it a certain air of discomfort, is noticeable in Irish institutions for the insane, a want which we trust, with the advancing prosperity of the country, will be gradually obviated; yet, when your Excellency, so long and thoroughly cognizant of the social condition of the population, recalls to mind what on your frequent visits to District Asylums you could not fail to remark, and reflects that a large proportion of their inmates whilst possessed of reason, had been strangers to the personal comforts of life, and, we regret to add, in many instances, from their abject state of destitution, to the decencies of civilization, but still protected by an innate sense of virtue and decorum—huddled together in those miserable abodes which present themselves in quick succession along our public thoroughfares, on the edge of bogs and sides of mountains—without adequate food or raiment—whole families frequently occupants of a single apartment, perhaps of a common bed—that the same individuals placed in asylums, labouring under madness in all its varied forms, are educated for the first time to habits of order and cleanliness, have servants at all hours to minister to their personal wants—their dress and bedding duly attended to, meals served regularly with a liberal allowance of animal food, a luxury before almost untasted by them—we may, as tending to social advancement no less than for curative objects, so far regard our public establishments for the insane with unmixed satisfaction.”

The Commissioners find much fault with the system of committing “dangerous lunatics” to gaols; the law in Ireland being essentially different from that in our own country. The magistrates are empowered to imprison persons “discovered under circumstances denoting a derangement of mind, and a purpose of committing an indictable offence;” and from prison they may be transferred to the district lunatic asylum by a warrant of the Lord Lieutenant. The number so committed during the last two years amounted to 1296.

The objections are, that gaols become thereby only “so many channels of transmission to lunatic asylums, whereby a serious derangement “of prison discipline and considerable additional expense to the public are produced.” The Commissioners have before commented upon this; but the abuse seems to have increased. It operates unfavourably in another respect, that in this manner families get rid of their troublesome insane members in a summary manner. They scarcely think it worth while to apply for an admission to the asylum in the ordinary manner, but they “depose to the existence of violent tendencies, the result too often of premeditated irritation.” Under the guard

of the police, the unfortunate individual is conveyed away to the county prison, and "with this act the curtain drops between the parties."

"The usual form of admission into a District Asylum requires an attestation as to the residence, birth-place, and social state of the person desired to be admitted; also an engagement on the part of some responsible party to take back the patient when called upon to do so. A committal obviates all this responsibility, and we have frequently known of applicants who were refused admission by the local board on sufficient grounds—such as not being natives of, or in any way connected with the district—having been sent to gaol as dangerously insane, and in this manner ultimately forced on the institution. Thus, while admitting that the Act was in some measure necessary, we cannot shut our eyes to the many and glaring abuses which have arisen from it.

"Of the conduct of the class in question, we find that the great majority, far from exhibiting any of the dangerous tendencies attributed to them, are tranquil and amenable from the very moment they are placed in confinement; and, generally speaking, this character attaches to them afterwards when transferred to asylums—the so-called 'dangerous,' however troublesome, evincing as little propensity to violence as ordinary lunatics."

Very few instances appear to have occurred of anything approaching to cruelty in the treatment of those thus committed; and Dr. Nugent even considers that as to recovery, there are elements of success met with in gaols, which are not found to the same extent in the asylums; such as more frequent association with the sane, and the fact that if thus committed, it is generally in the earlier stages, and therefore the affection is more amenable to treatment.

The notice of the Central Criminal Asylum at Dundrum is especially interesting from the nature of its cases, and from the reflections on the subject of criminal responsibility which it suggests. The number of criminal lunatics remain exactly the same as at the last report—82 males and 44 females. In the two years 26 have been discharged or died. Of these—

- 14 cured—7 liberated by order of the Lord Lieutenant.
- 3 sent back for trial.
- 3 sent back to gaol.
- 1 sent to a county gaol.
- 1 removed to a private asylum.
- 11 died.

With reference to insane convicts, the Report speaks as follows:—

"The greatest, indeed the sole, difficulty to be dealt with at the Central Asylum arises from the occasional residence in it of culprits

who either feign insanity or whose claim to the designation of lunatic is at best but doubtful. There are persons transferred from gaols subsequent to conviction, and at whose trial the question of insanity was never entertained. Some of these may be faithfully described as having set discipline at defiance. Indifferent alike to remonstrance and to punishment—influenced, as it were, by a determination not to yield till their object was attained—intractable in prison—their conduct uncertain and unaccountable—the authorities there report to the Executive that they have no appliances for their treatment; that the establishment is kept in turmoil and confusion by such characters; and submitting their removal to the Criminal Asylum, to which they are accordingly drafted as vacancies occur.

“The air of Dundrum, the situation, remarkable for its cheerfulness and salubrity—transition from close confinement, and the restraint and regimen of a prison, to comparative freedom and a better diet, produce in a short time a change in their demeanour; they still, however, consider themselves entitled to be supported by Government; and that being recognised as lunatics, they should not be required to work.”

A considerable number of the committals to Dundrum appear to the Commissioners to be of questionable propriety, as may be observed in the following passages:—

“The question hence arises, are persons to be recognised as lunatics by law, who, thoroughly cognizant of right and wrong, having committed offences against public order, and whilst undergoing the punishment consequent thereon, set authority and discipline at naught by their insubordination and perversity of temper? For if, after conviction, these traits of character protect from the penalties attached to crime, they should, *a fortiori*, at trial, when duly established, procure acquittal on the plea of mental incapacity, although the parties may be competent to distinguish good from evil. The solution of this point is a matter of great importance, not alone to the criminal code of this country, but likewise to that of the sister kingdom. . . .

“During the last ten years we have had a tolerably large experience in lunacy, feigned as well as real, and in aiding the prosecution of certain capital cases to conviction, have, with local physicians, been instrumental in checking it as a plea; to those cases we have cursorily referred in previous Reports. The benevolence certainly—possibly, it may be, the superior knowledge—of some would associate crime with insanity; we do not, however coincide in the view, that a disregard of moral perceptions can qualify deeds, the results as well as the responsibilities of which are perfectly well understood beforehand by the perpetrators of them; at the same time we cannot but consider it a misfortune to the insane to be acquitted on the plea of lunacy, without that special statement of every circumstance which might tend to establish their irresponsibility, or mitigate the character of their offence; in either case, acquittal often tells against the parties themselves, changing a definite to an indefinite period of confinement, a fact most justly suggested as a precaution to counsel, we believe, by the late Baron Alderson; but it is not with the legal so much as the

social point we have to deal ; for in the asylum at present there are two or three inmates confined *as lunatics*, who never evinced a symptom of insanity to our knowledge ; one of whom particularly inveighs against having been transformed into a lunatic in the dock by counsel, to his great dismay and surprise at the moment, and to his continued discontent for a period of over eight years, during which he has been in confinement."

The Commissioners speak in very high terms of the judicious and benevolent management of Dr. Corbet, the resident physician, under whose government, without mechanical restraint, and without punishment of any kind, violence is almost unknown ; and the transgressions are rarely more serious than the breaking of a pane of glass. The patients are generally occupied, either in their previous trades, in the farm, or in some other appropriate employment.

In the private asylums the number of patients is 462—252 males and 210 females : 91 have been discharged, 47 cured, and 44 "very much improved."

The sanitary condition of these private establishments is said to be excellent, the mortality being only about 4 per cent. on the entire number. This compared with the estimate given by the authorities on the statistics of insanity would appear to be remarkably low. Dr. Thurnam says that whilst a mortality of more than 9 or 10 per cent. must be considered high, one less than 7 per cent. is highly favourable.

Concerning mechanical restraint there is the same variation as in the public institutions—in all cases, however, it is very slight, in some it is entirely relinquished under all circumstances. The Commissioners, after relating one or two cases illustrative of the various views and requirements, add :—

"On this subject we may observe, that the total abolition of mechanical restraint has been strongly advocated by some of the most eminent physicians both in England and in this country ; while, as we have already stated, others of great practical experience, contend that there are cases, such as the above, in which it cannot be wholly dispensed with, without imminent risk to the patient, and possible injury to the attendants. We cannot but think that, at least, the discussion of the question, and the support given to the non-restraint system, have been of incalculable advantage, inasmuch as it is now acknowledged, that on most occasions where recourse would heretofore have been had to mechanical appliances—perhaps in a severe form—they can now, with safety, be entirely dispensed with ; and that only in extreme cases, where the physician must be left to the free exercise of his own discretion, should restraint of any kind be resorted to."

The following remarks on Moral Insanity and on Hereditary Transmission are interesting and instructive :—

"As formerly, so within the past year, cases of moral madness, originating in drink and dissipation, have been frequently admitted into private licensed houses. Some of them, discharged after a few months' confinement, were not since re-admitted, whilst others have been brought back. These latter cases are most perplexing: even after the lapse of a few days the salutary effects of control are visible in their regard; once free, however, they become the mere children of impulse, reckless of personal respect, regardless of the value of money, and scorning even decency itself. Rational in conversation, and most plausible in manner, within the asylum, their conduct is displayed out of doors in a series of the most irrational actions. It is painful to keep such parties confined, but still more so to let them run at large to certain destruction. As an illustration, we may adduce the case of a lady, at present in confinement in a private licensed house, who has been admitted and discharged four or five times within our knowledge, and who, when at liberty, and mistress of her allowance, spends it in one continued orgie of drink and dissipation. We may here observe, that a characteristic of this class is, at all times, an utter disregard of truth, together with an unceasing desire to impose upon the credulity of their hearers by the most specious pretensions to sense and wisdom, and the most solemn promises that a future morality would efface the errors of their past life.

"In the course of the year just elapsed, we have observed some instances strongly illustrative of the hereditary transmission of lunacy, and the extent to which it runs in families, so many as four relatives, in the degree of parent and child, having been confined in an asylum together—a fact fraught with serious consideration, and involving even the prospective position of the unborn themselves. Two, and even three members of the same immediate family labouring under symptoms of insanity is, to our knowledge, a matter of common occurrence. At Swift's Hospital, for example, now in existence for more than a century, we find, since its foundation, the same stock to have been continuously represented by its insane members."

We give the general summary of the Commissioners, with their recommendations, entire:—

"Summing up the results of our progressive experience from year to year, on the state and bearing of lunacy in this country, and on the organization of establishments generally for the insane, we would recommend that the existing asylums, repaired fully where repairs are needed, and supplied with the appurtenances of judiciously constructed establishments, such as lavatories, baths, workshops, water-closets, &c. &c., should be constituted hospitals for the treatment of mental disease in its early and more curable stages, as well as receptacles for lunatics, no matter how hopeless their recovery, but who, for their own or public safety, require a constant and careful supervision. For these two legitimate objects, we think, with similar establishments in Donegal and Wexford, and certain enlargements at Clonmel and Armagh, the present asylums could be rendered amply sufficient for the exigencies of the country. Most of the original institutions re-

quire to be partially remodelled, to secure a better classification of patients; and as they are, with one or two exceptions, deficient in infirmaries, chapels, laundry accommodation, and in large halls or dining-rooms, suitable provision under these heads should not be overlooked. We would disembarass poorhouses of all lunatic inmates, and existing asylums of the idiotic and epileptic classes, who are at present supported therein at a large expense and without any commensurate hope of benefit, by allocating them in plain structures, but still well devised for the object, where quiet and chronic patients might find a refuge, placed under the same central control as the acute and dangerous just referred to, with a scale of dietary and social comforts beyond what are conceded to the ordinary paupers of a union, having ground for exercise and employment, and their support provided for as in the primitive houses by quarterly advances from the Treasury. For this object we do not think that provincial depots would be successful: the number of counties attached to each would cause much embarrassment in their working—and the unavoidable expense and inconvenience consequent upon the conveyance of patients from remote localities constitute serious objections. It appears to us more feasible, that each district requiring one should have a chronic hospital for itself; and if the area was extensive, such as that connected with the Ballinasloe Asylum, it might be matter for consideration whether it would be more judicious and beneficial to the counties to have the buildings in question at a distance from, or adjoining the parent establishment.

“Of the present system of management through Governors, subject to certain modifications, on the whole, we cordially approve; believing that gentlemen of education, rank, and position, whose acquaintance with fiscal affairs, and personal interest in the well-being of the country, afford the best guarantee for the due and economical expenditure of its rates, are the most suitable persons to appreciate the peculiar claims of the insane on the benevolence and liberality of the public; as well as from the fact, to which we can personally bear the most gratifying evidence, that a question of party or religion was never mooted within the walls of an Irish Asylum.”

In the copious Appendices to this Report there is a vast mass of statistics, from which we extract a few details.

The total number of patients that had been treated in the district asylums during the year 1856-7, from March to March, was 4888. Out of this number 542 had been cured, 149 “improved,” 45 discharged “not cured,” 1 “incurable,” 4 had escaped—whilst 3856 remained under treatment. The deaths amounted to 291, of which 290 were from “natural causes,” one only accidental (suicidal).

The causes of death are worthy of note, consumption being by far the most frequent. For the two years ending March, 1856 and 1857, there were 559 deaths, the chief cause as follows:—

	M.	F.	Total.
Consumption	48	69	117
General debility and old age	41	49	90
Paralysis	40	13	53
Epilepsy	34	10	44
Dysentery	21	14	35
Marasmus	16	15	31
Apoplexy	20	10	30
Pulmonary and bronchial affections	12	19	31
Dropsy	1	9	10

It will be remarked how very disproportionate are the male and female deaths from apoplexy, epilepsy, and paralysis; the balance being kept up by the greater number of deaths from consumption and all other pulmonary affections; also in dropsy. The other causes of death are comparatively unimportant.

An investigation of the trades, &c., of the inhabitants of the public asylums gives curious results. Out of the 3856 under care in March, 1857, no less than 1465 were connected with agriculture; 367 were domestic servants, only 42 of them males; 88 were dressmakers; 58 shoemakers; the other handicrafts about 40 each.

Under the head of "miscellaneous occupation" are found 239, only 21 being male;—"unknown" are 273 male and 638 female.

The forms of disease are thus given:—

Mania	2102
Monomania	208
Dementia	574
Melancholia	580
Imbecility and epilepsy	216
Idiocy	176
Total	3856

The *causes* are classed as—

	M.	F.
Moral	692	447
Physical	948	334
Hereditary	506	275
Not known	1710	831

Amongst the moral or mental causes, grief (210) and reverse of fortune (184) are much the most frequent. Love and jealousy furnish 97 cases, of which 70 are females; terror 79, of which 53 are females; religious excitement 70, 48 being females; domestic quarrels 15, 12 being females.

Of the physical causes, intemperance (491) and epilepsy (150) represent above two-thirds of the cases; after these, fever and bodily injury are the most frequent. Injury of the head is only 36 times the cause.

Dr. Nugent gives a table indicating the probability of cure as applied to these 3856. He supposes 1187 to be curable, 2222 to be probably incurable; 194 are idiots, and 253 are lunatic epileptics.

There is something instructive in examining the account of the previous occupations of the upper classes of the insane, those, viz., who are confined in private establishments. The entire number amounts to 462, out of which 253 had *no occupation*. The remainder were thus divided: army 23, navy 5, church 24, law 20, medicine 7, students 14, trade 37, farmers 29, other occupations 50.

With the exception of monetary matters, we have now passed in review all the most important subjects treated upon in this very valuable Report, which, however, will well repay a detailed perusal.

ART. VIII.—PSYCHOLOGY OF WOLF.*

BY PROFESSOR HOPPUS, LL.D.

IN the career of German psychical speculation, a conspicuous part was borne by Johann Christian von Wolf. He is mainly characterized as the author of a philosophy founded on that of Leibnitz, but modified, systematized, and exhibited, according to his own forms and modes of thinking, being expanded into elementary treatises, and reduced from the scattered and desultory materials which abound in the multifarious productions of Leibnitz, into a digested arrangement. Hence it has been usual on the Continent, since the time of Wolf, to designate the mass of these speculations as the Leibnitz-Wolfian philosophy.

Like not a few others of the great metaphysicians of the ideal school, from Descartes downwards, Wolf was a man of encyclopædic learning in his day. He was born at Breslau, in 1679, and early devoted himself to the eager pursuit of knowledge in the Magdalen Gymnasium of his native city. He here acquired no small reputation for his skill in the wrangling disputations which were the fashion of the age, and he is said to have met with few who could compete with him in these exercises. He had scarcely passed his youth, when having heard of the effects which the writings of Descartes were producing, in opposition to the old scholasticism still in vogue, Wolf ardently applied himself to the Cartesian philosophy; and he appears, at this early age, to have conceived the idea of doing for practical, the same service which Descartes had aimed to render to theoretical philosophy. This task he hoped to achieve by the application of a stricter

* Opera J. C. Wolfii. Breslau.

mathematical method than had hitherto been attempted. With this view, he entered on the study of the exact sciences.

In furtherance of his design, he repaired to Jena, where mathematics engrossed his attention, in the hope of preparing himself for securing a solid basis for metaphysics in the science of number and quantity. He afterwards passed some years at Leipzig; and he here maintained a thesis on the mathematical method, which was published in 1781, under the title *Philosophia Practica, mathematico modo conscripta*. At Leipzig he studied under Tschirnhausen, delivered lectures, and published his treatises *De Rotis Dentatis*, and *De Algorithmo Infinitesimali Differentiali*. It appears to have been his early intention to take holy orders: but this project was overruled by his ardent desire for the pursuit of intellectual and scientific truth; and perhaps in some measure from the encouragement he received not only from Tschirnhausen, but also from Leibnitz himself, to whom he had been introduced by Munken. Perhaps Leibnitz saw that Wolf was eminently adapted, by his methodical and rigorously logical cast of mind, to complete what Descartes and himself had done so much towards achieving—the final overthrow of the empire of Aristotle in Germany.

In 1711 our philosopher became professor of mathematics at Halle, having previously been invited to Giessen. At Halle he wrote his treatise *De Methodo Mathematicâ*, and his work entitled *Elementa Matheseos Universæ*. This voluminous publication, which in the later Genevan edition extended to five volumes quarto, comprises, along with other subjects, "A Description of the Mathematical Method; Arithmetic; Geometry; Plane and Spherical Trigonometry; Mechanics and Statics; Hydrostatics; Optics; Perspective; Astronomy; Geography; Chronology; Dialling; Pyrotechny; Architecture;" and an "Account of the Principal Writings of Mathematicians." In 1710 he was elected a Fellow of the Royal Society of London. In 1728 he published his "Tables of Sines, Tangents, and Logarithms." The "*Acta Eruditorum*" bear many testimonies to his industry and learning, in the papers which he contributed relating to the mathematical and physical sciences.

But Wolf's inclination led him to devote his energies almost entirely to the study of metaphysical and moral philosophy; and in order to gain the public ear for these subjects, he did not hesitate to depart from the immemorial custom in Germany of publishing learned works in Latin. He made the German language the vehicle of his philosophy. This circumstance alone could not fail to give him a great advantage over Leibnitz and all who had preceded him in the career of speculation in that country; no doubt it contributed very greatly to the popularity of

his more strictly philosophical writings. His works in Latin and German are from sixty to seventy in number. Between the years 1712 and 1723, he published his *Vernünfftige Gedanken von den Kräften des menschlichen Verstandes—Metaphysik oder Vernünfftige Gedanken von Gott, der Welt, und der Seele des Menschen, auch allen Dingen überhaupt**—*Anmerkungen dazu—Versuche zur Erkenntniss der Natur und Kunst—Vernünfftige Gedanken von den Wirkungen der Natur—Von den Absichten der Natürlichen Dinge—Von des Menschen Thun und Lassen—Politik, oder vernünfftige Gedanken von dem gesellschaftlichen Leben der Menschen—Nachricht von seinen eigenen Schriften in Deutscher Sprache in verschiedenen Theilen der Weltweisheit—Gesammelte Kleine philosophische Schriften*. Wolf also published at a later period a "Mathematical Dictionary," in German. The detached pieces in this language under the title of *Gedanken*, which treat of the powers of the human mind, the Deity, the universe, the operations of nature, the search after happiness, the constitution of society, and other subjects, present their respective doctrines in a simpler and more concise form than is adopted in the great work in Latin, which embraces the same topics in an extensive and far too diffuse course of philosophy. These smaller pieces which preceded are still highly useful to all who read German, and are calculated to give a very adequate knowledge of the author's doctrines; indeed it was these pieces in the vernacular tongue that spread the fame of Wolf over Germany.

Wolf was now regarded as Leibnitz's most illustrious disciple, and he received while at Halle invitations to the chairs of philosophy, at Wittenberg, Leipzig, and St. Petersburg. However, he remained at Halle till a violent hostility towards him arose among the theological professors of that university. Wolf himself was, at the time, Dean of the Faculty of Theology, and a jealousy appears to have arisen from the circumstance of the Dean appointing one of his own pupils to be his assistant, in preference to another student whom he thought incompetent, but who, unfortunately, happened to be the son of one of the other professors. Thus an occasion arose which proved of serious consequence to our hitherto prosperous philosopher. It is certain that Wolf was a man of pure morals, amiable temper, and orthodox Christianity. In conformity with his system of proving everything, he applied the Cartesian method strictly to religion, and he endeavoured to establish its usually admitted doctrines by a series of syllogistic demonstrations. He maintained that the truths of religion ought to be believed, because they could

* If ever there was a man who tried to grasp the *omne scibile*, it was surely Wolf!

be put to the test of the syllogism. His opponents held that they ought to be believed because they were received from Scripture by the almost universal consent of the Church. Wolf's intention was to do service to Christianity by reducing it to logic; the divines of that day were not prepared for so bold an innovation, and they charged him with heresy, and inferred everything which is always supposed to be at once capable of being inferred from such a charge. His philosophy was opposed to religion and morals—he substituted the agency of mechanical causes for the empire of Providence—he introduced fatalism into the events of the moral world—his views regarding “pre-established harmony” left no room for freedom in God or man. That these allegations were not just was no matter: they alarmed heads that did not want their brains puzzled with metaphysics; and which, perhaps, could not always, if they would, very well distinguish between a mere metaphysical question and the article of a creed.

To make matters worse, it happened that Wolf, in lecturing to his class,* had pronounced an eulogium on the moral precepts of Confucius, which had lately become known in the West by means of the researches of the Jesuit missionaries. This unlucky circumstance greatly inflamed the controversy. To approve of the ethical doctrines of a pagan philosopher was pronounced, in that bigoted age, unworthy of a Christian divine, and even heretical, by the dominant party at Halle. They were known in Germany by the name of “Pietists,” and with all credit for sincerity, their views of religion, of man and his moral nature, were, in some respects, founded on narrow and mistaken conceptions and interpretations of Holy Scripture. Hermann Franke, founder of the Orphan School, one of the best and most celebrated of the Pietists, held at this time a theological chair in the University: crowds of students from various parts of Germany had flocked to hear him; but it was in vain that he opposed the new philosophy from his chair; he now found himself comparatively deserted for the more attractive lectures of Wolf. The Pietists first accused him before the Academical Senate, and afterwards complained of him to the King of Prussia, Frederic William I. They proceeded to the length of charging him with atheism. They denied the possibility of his demonstrations, though some of their party inconsistently adopted a line of argument very similar to that of Wolf himself.† It was even alleged by some of his opponents

* This Lecture was published, entitled *Oratio de Sinarum Philosophiâ*. Halle, 1726.

† Vid. Lange's *Causa Dei et Religionis Naturalis adversus Atheismum et Pseudo-philosophiam*. Halle: 1723.—Also Ribov's *Beweis dass die geoffenbarte Religion nicht könne aus der Vernunft erwiesen werden*. Göttingen: 1740.

that his doctrines were dangerous to the army, and tended to excuse desertion! This was enough: Wolf had orders to quit the Prussian dominions in two days, on pain of the severest penalties of the law; though he informed the minister at Berlin that he had intended to publish his lecture at Rome, with the consent of the Inquisition—so little did he apprehend persecution for it in philosophical and enlightened Germany! But such was the feeling among the Pietists, that no sooner had Wolf quitted Halle, than the excellent Franke threw himself on his knees in the church, and gave thanks to God for the deliverance, almost as though Wolf had been the animal which his name imports.

Driven thus summarily, and without a fair hearing, from Halle, in 1723, Wolf took up his abode in Hesse Cassell, where he was well received by the Landgrave, who appointed him Professor of Philosophy and Mathematics at Marburg, and conferred on him the title of Aulic Councillor. Wolf continued here about eighteen years, and from 1728 to 1740, he published his metaphysical works in the large Latin edition. This immense course of philosophical disquisition comprehends *Philosophia rationalis, sive Logica methodo scientifica pertractata*—*Psychologia empirica*—*Philosophia prima sive Ontologia*—*Cosmologia generalis*—*Psychologia rationalis*—*Theologia naturalis*—*Philosophia practica universalis*—*Philosophia moralis sive Ethica*—*Jus Naturæ*. He also wrote *Specimen Physicæ ad Theologiam naturalem applicatæ*. His Latin course of philosophy was published in no less than twenty-four quarto volumes. The *Jus Naturæ*, alone, in the Frankfort and Leipzig edition of 1732, is in eight quartos. His *Jus Gentium* was not published till 1752.

Wolf did not fail, in his new chair at Marburg, where he was beyond the reach of his opponents, to vindicate himself with a vehemence proportioned to their attacks. The dispute, indeed, had extended itself far and wide over Germany, and Wolfian fought with anti-Wolfian incessant metaphysical battles, in which neither party gained the victory, though both claimed it. Among his own followers the controversy was identified with the independence of philosophy. At length the opinion gained ground that Wolf had been unjustly and harshly dealt with; and that neither religion nor good government would be promoted by the attempt to suppress freedom of inquiry—an attempt which is always sure, sooner or later, to be succeeded by a re-action. Frederic appointed new commissioners to examine and report on the writings of the banished professor. They declared that Wolf's philosophy contained nothing opposed to the interests of the State, nothing dangerous to morals and religion, nothing con-

trary to the orthodox Lutheran doctrine. Wolf was repeatedly invited to return to Halle; this, however, he refused to do so long as Frederic William reigned. In 1740, Frederic the Great ascended the throne, and the next year Wolf accepted the invitation. Among other honours domestic and foreign which now fell to his lot, the king made him a privy-councillor, vice-chancellor and afterwards chancellor of the university; and the Elector of Bavaria conferred on him the dignity of a Baron of the Empire. Wolf died in 1754, of gout in the stomach, in the seventy-sixth year of his age, having borne his sufferings with Christian piety and fortitude.

From Descartes Wolf imbibed that independence of thought, and attachment to the mathematical method which characterized the school of that eminent philosopher. From Tschirnhausen he obtained the idea of the necessity of aiming at precision of language, logical exactness in definition, and the harmonious combination of the *à priori* method with the results of experience. But it was to Leibnitz that Wolf directed his principal attention. He thought the time was come for attempting a national philosophy to which Leibnitz might furnish the clue, more especially as Germany was now no longer contented with having a foreign literature, and was advancing towards one that should be indigenous to its own soil. Wolf found the thinking world grown weary of the scholastics. Aristotle, whose excellences and errors were equally confounded with the dogmas of the schoolmen, had already shared largely in their fate. Platonism was less known than Aristotelianism, and it was moreover always wanting in a didactic method. Thomasius was not elevated enough for the taste of the learned public. Descartes had not so applied his principles as to promise durable results. Leibnitz, indeed, the cynosure and prodigy of his age and nation, had laid foundations which the best minds of the day were disposed to regard as solid; but on these foundations he had only built limited and detached erections. Wolf had an ambition to finish what Leibnitz had begun, with such alterations both of plan and execution as he might himself deem expedient; and, whatever may have been his success or failure, he went to work like a true German, and fully sustained the character of a most indefatigable student, and a writer of vast industry and enormous labour. He appears to have had several points of character in which he much resembled the head of his school. He was candid, simple, and disinterested. When the King of Sweden asked him what he could do to serve him, he merely replied that he "wanted nothing." Amidst vicissitudes of fortune, and bigoted and unjust persecutions for his opinions, he sustained equality and serenity of mind. Like his great master in philosophy, he

was not free from vanity; but he was ingenuous and urbane, and was generous even towards his enemies. The love of intellectual truth was a passion with him. He was more attached to method and system than Leibnitz, at least to its forms and signs. In originality, however, he was far inferior to his master, Leibnitz was the father of German philosophy: Wolf was the reviser, the critic, the systematiser of German ideas. He brought to the sciences which he studied a great talent for arrangement, but he was not a creative genius. He gave to human knowledge a didactic form which it had not previously received. It was the order, method, and comparative clearness of his writings that enabled him to reign over the mind of Germany for more than half a century, in a manner which Leibnitz, for want of more system, for want of a vernacular garb for his thoughts, and for want, perhaps, of an equally enlightened tribunal to appeal to, had not attained. It must not be supposed from what has been said that Wolf was a mere echo or copyist of Leibnitz. In many respects he differed from him. Wolf was a kind of eclectic philosopher, and in this he showed wisdom: for unless truth be sought on the principles of eclecticism, an existing age must reject much of the advantage which is to be derived from the history of human thought—its errors and its triumphs. Wolf's eclecticism was not bound by any national or sectarian prejudices. Like Leibnitz himself, he borrowed from the ancients as well as from the moderns, and he did not disdain to cull from the scholastics. We sometimes find him endeavouring to bring Descartes and Leibnitz into union. In his attempts of this sort, he has shown judgment and independence, if he has sometimes failed in the arduous task of reconciling different points of view. It must be admitted that his harmonizing efforts sometimes lead him into heterogeneities and incompatibilities with himself.

Wolf has developed germs of thought, and combined scattered ideas from Leibnitz: he has modified the elements which passed through his hands, and clothed them in a new form. Descartes, Spinoza, and Leibnitz, all more or less employed a method borrowed from mathematics: Wolf aimed at this method in a more rigorous form. In fact, the idea of reducing philosophy to mathematical formulæ was his idol: it was founded on a capital oversight of the essential difference there is between the science of quantity (in which such elements as time, space, and the fixed relations of number are concerned) and the mental and moral phenomena of man in general. Even the example of Spinoza does not seem to have warned our author from this course. The exact sciences are strictly and purely "rational." On the basis of definitions, and with the aid of undisputed axioms, the most extended and intricate combinations become plain by means of a

series of transformations in which there is no room for any difference of opinion or point of view. Logic is based on these grounds, and the exact sciences as such are exemplifications of logic. But beyond this domain—in the speculations of psychology and morals—experience has a wide sphere. Their objects are of a mixed and often of an indefinite nature, and they do not admit of being reduced to the well-defined conditions of the mathematical sciences. In order to meet this difficulty, Wolf endeavoured, in various branches of philosophy, to separate the purely rational part from that which belonged to experience, and to reduce all under one system by prolix demonstrations. That he was as successful as he thought himself to be, none of his readers will now admit. The appearance of mathematical accuracy in subjects not mathematical may seem grave and strict, inspiring the expectation of great accuracy; but the appropriateness of the method, beyond the domain of the exact sciences, has now long since been more than questioned. It was, however, popular in Germany under the auspices of Wolf, and it was not till Kant arose that a final blow was given to this dogmatic method of reducing all knowledge. Wolf had at least the merit of putting this method, as an organon of all truth, to the test; and it must be admitted that, however unsatisfactory his procedure for the cure of error may have been, his influence on the entire intellectual development of Germany was very great, and the German language is much indebted to him for being the first to make it the general vehicle of philosophy.

In his *Ratio Praelectionum* our author prefers Aristotle's division of the sciences (theoretic, poietic, and practical) to that of Lord Bacon (history, poetry, philosophy); but proposes his own, which is history, philosophy, and mathematics. Science he defines to be the "process of demonstrating what is asserted." Philosophy he terms the "science of all that is possible and real, and of the why and wherefore of its possibility and existence"—it is the "science of what is and has been, and of that of which a reason can be assigned."* Cause is that which contains within itself a reason for the existence of some other thing. Relatively to the maxim that every thing, change, or circumstance, must have a cause—he states a somewhat qualifying condition, namely, that "what has only a contingent existence must be produced by some efficient cause."† The first thing which ought to occupy the philosopher is *Logic*, or "rational philosophy,"‡ which derives its principles from ontology, or the "science of being *à priori*," and from psychology. Wolf's logic is essentially Aristotelian, though like most of the logicians, he has made his own changes and emenda-

* *Logik, Vorbericht*, § 5.

† *Ontol. cap. ii.*

‡ *Vid. Philosophia Rationalis sive Logica. 1734.*

tions. He treats it in the way of Leibnitz, and defines it the "science which directs the thinking faculties in the search after truth." He divides it into theoretical (with nearly the ordinary heads) and practical logic, which distinguishes and discovers truth, is a basis for criticism, communicates instruction, estimates evidence, and aids in the common duties of life. The criterion of truth in a proposition is that the "predicate may be determined by the notion of the subject." This looks at first like Kant's description of the "analytical proposition," to the exclusion of the "synthetical" one; but on tracing the theory of knowledge as held in the school from Descartes, we see that it was meant to be a general account of propositions. Descartes' criterion of truth was the "distinctness and clearness of the ideas" under which the proposition is couched; and Leibnitz's criterion was the "consistency of the ideas among themselves." The latter view seems hardly to differ from Wolf's, except in words.

Our author's speculations on Truth are much hampered by his artificial method, and by his assumptions respecting the extent to which mathematical principles may be applied in general. His developments are often exceedingly tedious, and his proofs are sometimes not more evident than the proposition to be proved. He has long disquisitions on method, on hypothesis, on the inductions of experience, and the like topics, which are felt by the reader to be not only wearisome but also trite and commonplace. Respecting the connexion of the sciences, we again encounter his rigid abstractions, in his attempts to seek their relations in *à priori* deductions rather than in any more practical and obvious source. In discussing these and other topics, however, he conferred upon his age the benefit of introducing even into popular use a great number of scientific terms which had not previously been generally current.

Many of our readers will be aware* that Leibnitz, while reducing all truth to the two principles of "contradiction," or identity, and of the "sufficient reason" (the former of which included all *à priori* truth, and the latter all other truth), nevertheless maintained that, in the last analysis, even the principle of contradiction might be regarded as falling within the range of the principle of the sufficient reason: for the proposition $(a + b) + (a - b) = 2a$ has a sufficient ground for being believed, from its denial involving a contradiction. Wolf, with less propriety, we think, holds the opposite view, that the foundation of all rational knowledge, even of the principle of the sufficient reason, as well as of every other metaphysical axiom, is the principle

* See our notice of Leibnitz in a former Number.

of contradiction : for, says he, "if a thing had no sufficient reason for its being, something must arise from nothing, which is a contradiction."* To us there appears, here, a confounding of strictly logical with metaphysical truth—the analytical with the synthetical judgment, which were afterwards so well distinguished by Kant.

Our author's division of philosophy is into two general parts—theoretical, which relates to knowledge, and practical, which relates to action. Under the first head he includes *Ontology*, *Psychology*, *Cosmology*, and *Natural Theology*: under the second, *Ethics*, *Politics*, and the *Law of Nature and Nations*. This classification has to a considerable extent influenced the method of those systems of philosophy which have subsequently appeared among the Germans. We may add, that Wolf tried everywhere to separate the "purely rational" from the "experimental" part of knowledge; but it is generally admitted that he was not very successful in disentangling elements which are so closely blended in all our cognition.

Ontology, or *philosophia prima*, relates, after the scholastic fashion, to the doctrine of being, (*Wesenheitslehre*.) And here we find Wolf differing from his great predecessor with respect to the simplicity, composition, and essential nature of substances, a topic abstruse and shadowy enough in the hands of Leibnitz, and not much illuminated by the criticisms of Wolf. Leibnitz said that only simple or uncompounded substances are to be regarded as having *reality* (*ὄντως ὄντα*): Wolf admitted also compound ones to the honour of this category—and why not? Leibnitz bestowed on each of his monads, or simple unities, a sort of representative force (*Vorstellungskraft*) each being a kind of "mirror of the whole universe:" Wolf denied this,† and rendered the doctrine of the schools less mystical by retaining, as common to all the monads, only the inward efficient energy. Leibnitz's ontology is a pure ideal monism: Wolf's is a dualism of spirit and matter, of simple and compound, of representative or perceptive, and non-representative substances. The universe with him is not a living organization, as Leibnitz maintained, but a mechanism on which force has been impressed. The dualism of Wolf was so far a recession towards the old Cartesianism, and not an onward march from Leibnitz towards the absolute and nihilistic idealism which at last marked the German school in our own times. It is no wonder that Wolf's dualistic ontology is much blamed by some of the later Germans—it was at least two degrees from zero. In regard to the essence or nature of a

* Log. iv. § 5. Metaphysik, iii. § 192.

† Ontol. § 64. Kosmol. § 598.

thing, we find him mainly agreeing with Leibnitz.* This nature, or essence (*Wesen*) is its intrinsic possibility, the reality being the fulfilment of the possibility.† The essence of the composite is the simple, for the composite can have its cause only in the simple, which renders it possible.‡ We know from reason that there are simple existences, though they never present themselves in experience. Their origin is inexplicable; but they cannot in any natural way perish, nor can they undergo change otherwise than by the alteration of their limits.§

A substance, or a thing subsisting for itself, is that which has the sources of its changes in itself: but a thing which subsists by means of another thing is nothing else than a limitation of the preceding.|| Now, since the source of changes is called power or force, it is necessary that in everything which subsists for itself there should be a certain power;¶ and changes which take place by means of this power in a thing subsisting for itself are actions of this thing, which have their cause in itself: and through these actions a thing evidences its reality and self-dependence (*Selbständigkeit*), as well as its distinction from other things.** Moreover this power or force must not be confounded with a bare faculty (*Vermögen*), for a faculty marks only the possibility of doing anything: force, on the other hand, is that by which the possibility is translated into reality—that is into a continuous effort, or an action which produces an effect, and which consequently helps a possible into existence (*hilft einem Möglichen ins Daseyn*).†† And since everything which subsists for itself is making a continual effort to change its limits, that is, to alter its condition, and as nothing, and therefore no change can occur without a cause, therefore the preceding change must always contain something out of which the following one has its origin: for in this way only is the course of nature at all conceivable.‡‡

It is evident that closely as Wolf followed the traces of his master in his ontological speculations, he did not hesitate, as he went on, to modify Leibnitz's doctrines according to his own more logical and less imaginative turn of mind. Leibnitz endowed even his lowest order of monads with some kind of perception and appetency. Wolf, as we have seen, was not so indulgent to the plebeian herd as to allow them to be a kind of living "souls" (*âmes*); and by thus distinguishing the higher from the lower class, he evidently receded from the bold advance of his predecessor, who brought them, in some respects, into one

* Monadologie.

† Metaphys. cap. ii. § 55.

‡ Ebend. § 76.

§ Ibid. §§ 86, 87, 96, 102, 106—108, 113.

|| Ibid. § 114.

¶ Ibid. § 115.

** Ibid. § 116.

†† §§ 117—120.

‡‡ Ibid. § 128.

category; and Wolf was, so far, apart from the identistical idealism which afterwards reigned in the German school.

Psychology (Seelenlehre) is, according to Wolf, either empirical or rational. The former is merely the history of our actual consciousness; the latter is the "science of what is possible (i. e. *à priori*) with respect to minds." The being within us, the soul (*Seele*) is conscious of itself and of other things without itself; and its own existence is immediately certain to every knowing thing as such. The prime activity of the soul is the exercise of the representative faculty (*Vorstellung*), or of the power of forming ideas. From this, as united with consciousness, knowledge arises; and such union of representation with consciousness is called thinking.* The understanding (*Verstand*) is the source of those clear and distinct ideas which are owing to the proper self-activity of the soul. The senses (*Sinne*) and the imagination (*Phantasie*) are the source of direct sensations, and of obscure and confused representations. Reason (*Vernunft*) is nothing more than the faculty of discovering the general connexion of truths by means of conclusions and inferences.† We see, here, that the distinction between understanding and reason, was not first introduced into the German school by Kant, as some have supposed: it is evidently a Leibnitz-Wolfian distinction; but it was not always consistently maintained—not even by Kant himself.

Nothing corporeal can *think*, says Wolf, that is, can by its own activity represent anything to itself with consciousness—nay, it cannot even be passively sensible of anything acting on it, so as to feel the change effected. The power of thought and the faculty of sensation (*Empfindungs-vermögen*) belong exclusively to *soul*, which is placed in entire contrast with body, being incorporeal and simple. All the ideas and sensations which occur to it are only modifications (*Modificationen*) of its own constant and unchanging essence, produced from within or without itself.‡

The souls of men alone, adds our author, are spirits (*Geister*); that is, beings which are simple, having the faculty of representation, endowed with understanding, will, and freedom: consequently they alone are immortal. The souls of animals have, indeed, the faculty of representation, but they have no understanding, freedom, and will: like the simple (uncompounded) points (monads) of inanimate bodies they are not subject to natural decay, but they are not destined to be immortal.§

All the movements of the human soul are dependent on its own peculiar nature, conformably to which it represents to itself

* *Metaphys. cap. v. §§ 192, 194.*

† *Ebend. §§ 222, 738, 742, 784.*

‡ *Ibid. §§ 194, 277, 282, 284, 363.*

§ *Ibid. §§ 896, 921, 926.*

the objects of the universe; just as all the movements of the body follow from the nature of its own peculiar composition. The fact that these affections of the soul and the body harmonize with each other, is not the consequence of a reciprocal influence between them, nor of the immediate agency of the Deity, nor of occasional causes,* but is the result of a previously-established *harmony* which is not to be ascribed to the mere general principle of the will of God as the Author of nature, but depends on the special principle that every soul always represents to itself the world only according to the constitution of its own organic body, and according to the changes which take place in its organs of sense. Hence those representations and these changes always take place exactly at the same time, without the one being properly caused by the other: we should rather say, that both have their cause in a third thing—namely, the changes which are occurring in the universe itself, which reflect themselves in the body and on the soul.†

Wolf appears to have limited the Leibnitzian doctrine of “pre-established harmony” to the mutual relations of the body and the soul. Leibnitz himself had made it general throughout the universe. The monads had no real agency on each other; none of the objects in the creation exercised any reciprocal influence—not more than two clocks, each independent of the other, one of which is regulated to strike the hour at the moment the other points to it. This harmony is not the result of the immediate and constant agency of the Creator, but of an original arrangement of the parts and forces of the universe, which is a kind of machine set in motion at its creation by the first cause. Of course neither this theory itself, as applied to mind and body, nor any conceivable modification of it, solves any difficulty, such as, for instance, might occur especially to the moralist. It is fair, however, to remark that both Leibnitz and Wolf strenuously maintained the “freedom of the will,” and repudiated the form of necessarianism—fatalism—which some have charged upon the doctrine of pre-established harmony,‡ according to which

* The doctrine of “occasional causes” was developed from the Cartesian principles probably by Geulinx of Antwerp, and was fully adopted by Malebranche: it amounted to this—that God is the real agent in all changes; what are usually termed “secondary causes” are only the *occasions* on which he acts.

† *Ebend.* §§ 765, 979, 368, 786.

‡ This “harmony,” unfortunately, seems to have been one source of the *discord* between Wolf and his colleagues in the Senate at Halle, and especially the cause of his incurring the displeasure of the King of Prussia, which led to his banishment, as we have already stated. Euler, in his “Letters to a German Princess,” says that when the King was told that Wolf was lecturing to his students on “Pre-established Harmony,” he inquired what it meant. Frederic William I. was not possessed of a very subtle understanding, and had no patience for philosophy. One of his courtiers waggishly told him that it was a doctrine according to which

they both maintained that the soul acts as it would do if there were no body, the body as if there were no soul. It is not the volition of my soul that moves my arm, or causes the force to act which moves it; both agencies are independent of each other, and both are merged in the original pre-ordained harmony by which they seem, but only seem, to co-operate.

Wolf's *Cosmology* defines the universe to be a series of things finite and changeable, partly contemporaneous, partly successive, and united together in a whole. The rational science, which has for its object the world as a whole, capable of undergoing certain changes, is called by the above names (*Kosmologie—Weltallslehre*).* The changes in the universe are conditioned by the nature of its composition, according to the laws of motion, therefore by its mechanism: hence the universe may be compared to a piece of clockwork or a machine.† In virtue of the general laws of this universe-timepiece, no contingency is imaginable; everything which once has its ground in the series of things which belong to the universe comes necessarily to pass. Still this necessity, says Wolf, is also hypothetical, for the universe might have been different from what it is; various other connexions of things were possible, only they could not have been brought into real existence at the same time with the present arrangements.‡ Wolf, again, does little more than rehearse Leibnitz when he adds, that the constituent parts of the physical world are the bodies (*Körper*) which compose it; the constituent parts of bodies are their simple elements or natural unities (the Leibnitzian monads). The elements or unities have no special magnitudes, and therefore cannot be distinct from each other in quantity or figure, but only by means of powers and qualities; and they really are distinguished from each other, inasmuch as that nowhere in the whole universe one of them is perfectly like another.§

The language of Wolf as to dynamics is a compound of that of Newton with that of Leibnitz. Every body (*Körper*) has a certain amount of innate force (*Trägheits-macht—vis inertia*), by which it strives to maintain itself in its place, and to hold its existence and its essence; on the other hand, every body has also a moving power (*Bewegungskraft—vis motrix*), by which it endeavours to change its condition, and to act without itself.|| The continuity of bodies, and their extension in space, although

his Majesty's soldiers were nothing but "*mere machines*, so that if they deserted they could not help it, and were not by any means, therefore, worthy of punishment for it." The King immediately flew into a rage, and ordered Wolf to quit Halle without delay.

* *Metaphysik, oder vernünftige Gedanken*, u. s. w. cap. 4, § 544.

† *Ibid.* § 556.

‡ *Ibid.* §§ 569, 576.

§ *Ibid.* §§ 583, 585, 586, 589.

|| *Ibid.* § 607. See also Leibnitz's *Monadologie*.

they are composed of simple and inextended elements or unities, arise from this, that their elements are quite distinct from each other, without their unity among themselves being thereby prevented or impaired; for this unity is founded solely upon the connexion of the condition of each monad with the condition of all the rest.* This Leibnitz-Wolfian doctrine of elements wholly without extension, having no parts and no position in space, but yet constituting the bodies which are extended in space, is a paradox which no ingenuity can solve. Wolf's argument confounds the alleged unity of inextended elements with the property of extension; it is like saying that though nought or zero is nothing in itself, yet if you heap up an indefinite number of simple noughts you will obtain an arithmetical quantity!

Some of the later Germans complain that Wolf has, in some of these cosmological dogmas, lowered too much Leibnitz's theory of a universe of monadic souls, and almost changed it into a dead mechanism. They allege that he seems chiefly to conceive of the material world as a multiplicity of varying forms, showing themselves in the changes which are evident to our senses, while he almost seems to forget the unity and unchangeableness of the essence of the whole. It is true he makes the unities or monadic elements to have a certain life and activity, but he denied them the perceptive power with which Leibnitz endowed them. He made them, it is alleged, neither material nor spiritual, so that what they are is not plainly evident.† We are not at all disposed further to trouble our readers with these knotty points; we have already dwelt quite long enough on them. We will not enter on the question how far this criticism is just, or whether it is quite consistent with itself. Some of Wolf's cosmological speculations are, no doubt, obscure enough, and there is little here to choose between him and his master. His failure to make intelligible to the speculative intellect of his most acute countrymen who are advocates of idealism what these said "monads" are, speaks for itself. He is complained of for holding the dualism of matter and spirit; and he is complained of, at the same time and in the same quarters, for making the monads, which are of the essence of either or both, neither one nor the other. The moral of this is the old lesson: it is no wonder that so bright a genius as Leibnitz, and so arrant a plodder as Wolf should equally break down in the attempt to substitute fine-spun theories for real evidence, and to cure man's ignorance by giving loose to the reins of imagination.

* *Metaphysik*, §§ 604, 605.

† *Vid. Rixner's Geschichte*, ii. 203, *Anmerk.*—We must here acknowledge the aid we have derived from this author's labours.

With respect to *Natural Theology*, Wolf endeavoured to elaborate the Cartesian arguments from the *à priori* principle of necessary existence, and from the psychological fact of our notion of superior power: but in regard to the principle of the *sufficient reason*, he agreed with Leibnitz, who had maintained that "without this principle we cannot arrive at the proof of the existence of a Deity."* This is basing the grand fundamental truth of religion clearly on the ground of *causation*; and whatever may be said respecting what have been technically named by the later Germans the "ontological," the "cosmological," and the "physico-theological" arguments,† respectively, we are decidedly of opinion that, so far as they have any force, they are all virtually only so many forms of the argument from causation, which is evidently itself founded on the essential constitution of the human mind—an analysis than which nothing can be more ultimate and final. The external universe, says Wolf, as well as our own souls must have a sufficient reason (*zureichenden Grund*) of their existence: now neither of them contains any such reason in itself, for they are not of themselves, and cannot be; therefore the sufficient reason of both must be contained externally to both in a being which requires for its existence no ground or reason beyond its own essence. This being is God.‡

Wolf's further views respecting the nature and attributes of the Divine Being scarcely differ from those of philosophical theologians in general, up to the time when pantheism reduced all theology to an idle dream. God is simple (*einfach*) unchangeable, and unique (*einzig*)—an eternal, infinite, and absolutely self-existent being, the first and the last, before whom nothing was, and after whom nothing can be; a being entirely of and from himself, and independent of all other beings.§ In strong contrast with the dogmas of Spinozism, which so much gave the cue to some forms of the subsequent pantheism of which it was the parent, Wolf held that all that is was created by the Deity, not through mere necessity, but by reason and will. He is the absolute, free, and all-wise Author of all things, and he cannot be the mere "soul of the world" (*Weltseele*—*ψυχὴ τοῦ κόσμου*), that is to say, he cannot stand in that relation to the universe in which the souls of men and beasts stand to their bodies: for God knows all things immediately, of himself, and not as the soul knows mediately through the body. We must regard him as the purest, the most perfect, the most unlimited spirit, free from all corporeal impediment; a spirit whose understanding is all light and clearness, in which alone all things as to

* Recueil de Diverses Pièces.—*Vid.* our notice of Leibnitz in this Journal.

† *Vid.* Kant's Kritik der r. Vernunft (Rosenkranz), s. 462.

‡ Metaphys. cap. 6, § 945.

§ Ibid. §§ 947, 948.

their conception and their possibility were always contained, since nothing is possible but in so far as God recognised it from all eternity. From the divine attributes, as those of a being who is not only almighty, but all-wise, all-benevolent, all-perfect, it follows, as Leibnitz maintained in his "Optimism," that among all possible worlds God has created that which is the best.*

Under the head of "Practical Philosophy," we find those subjects treated which are usually comprehended under this name among the Germans: *Ethics*, *Politics*, and the *Law of Nature and Nations*. Baumgarten, we believe, was the first who added *Æsthetics*, or the philosophy of the sublime and beautiful, to this division. In his *Ethics*, theoretical and practical, Wolf sets out with the principle that consciousness truly attests man's freedom of choice in all actions of the will. Still he maintains that motives have such a determining power that their effects are inevitable. It is impossible that we should not will what presents itself to us, in our present state of mind, as good, and reject the contrary, as soon as the two objects are clearly apprehended. That which furnishes the motive by which we are determined to volition binds us to action, for without motive we cannot act. Liberty, therefore, is the faculty which man possesses to determine himself according to what appears to him, at the time, the best choice. It is evident that this theory of freedom and volition, as held by Wolf and his predecessor Leibnitz, was similar to that of President Edwards, the great Transatlantic metaphysical divine. It was, in fact, the doctrine of philosophical necessity as much guarded as possible against interference with human responsibility, as we find it expounded in Edwards's great work, "The Freedom of the Will."

Our author, in detailing the moral processes of the mind, remarks that men's sensibilities and ideas are the source of their appetites and their determinations—and this in virtue of the native energy of the soul itself, which has a faculty of desiring as well as of knowing. This faculty of desire, like the knowing faculty, is twofold: inferior and sensuous, which belongs also to the brutes, and the higher or rational form of desire which distinguishes man from the lower creation. The desire (or the aversion) which belongs to sense is an inclination or disinclination of animal nature to a given object, arising out of the idea or feeling of sensuous perfection or imperfection, the former being connected with pleasure and satisfaction, the latter with the absence of pleasure, with dissatisfaction, pain, or with hatred or disgust. On the other hand, rational and intelligent desire or aversion—that which belongs purely to the mind

itself—is excited solely by intellectual perfection, fitness, and moral good, or by the want of these, or by their opposites. The actually existing desire or aversion of the individual always necessarily follows the sensuous, or the intelligent and rational ideas which predominate in him: but his freedom of will consists in a man's always determining himself for that which appears to him the best in his existing inclination.*

Wolf's general principle of practical morals is, that every man should, to the utmost of his power, do that which is adapted to render his own condition and that of others as *perfect* as possible. Moral perfection he regards as essentially consisting in the "agreement of the results of a free action with the previous and subsequent conditions of being, according to a law of nature established by the Divine will." Reason is the power by which man takes cognizance of moral rules. Everything which tends to perfect the condition of man as a rational and moral being is *moral good*: whatever makes him more imperfect is *moral evil*. All man's free actions are necessarily either morally good or morally evil, as either conducing or not to the real highest welfare of man (*dem wahren Besten*) present and eternal.† Hence the universal principle of moral action may be reduced to the precept: "As far as lies in thy power, do that which truly makes thee and thy condition, as well as all others and their condition, more perfect, and forbear the contrary." The obligation of this principle, adds our author, lies in the divinity of reason itself, which, according to the will of God who has created us rational beings, we are bound unconditionally to obey.‡ Reason takes cognizance of the conjunctures which arise as consequences of our moral actions; and by the estimate she forms of these consequences she echoes the law of nature on which morality is founded. The beneficial consequences which God has connected with certain free actions constitute *natural reward*; the opposite consequences of other (bad) actions constitute *natural punishment*.§ But as man is a rational being, he is a law to himself, and so far as *reason* prevails, he needs not that rewards and punishments should lie in the perspective. Only let reason be supreme, and he will determine himself to known good and will forbear from known evil. So far as he does this he will be happy; and his happiness consists in a perpetual advance from perfection to perfection.||

While admitting that all moral good originates ultimately in God, Wolf regards actions as good or bad, intrinsically, and for their own sake, independently of the divine sanction or com-

* Metaphys. §§ 432, 492, 878, 889, 514, 519.

† Ibid. §§ 422, 426.

‡ Moral, oder Vernünftige Gedanken von der Menschen Thun und Lassen, § 9, 12.

§ Ibid. §§ 36, 37.

|| Ibid. §§ 24, 38, 44.

mand. This doctrine of the immutability and necessary fitness of morality is, we think, undeniable ; even God himself “does right ;”^{*} and if we are commanded to obey our parents, the reason is that “it is right.”[†] Our author goes further, and, with many of his successors, argues from the idea of duty, moral fitness, and moral order, that the obligations of morality would still subsist, even apart from the belief in a Deity, that morality is binding, as a law of nature, even on the atheist himself. But as human nature has received from its Author the laws which govern it, he is, in this sense, the prime source of moral law ; and he has attached happiness to virtue and misery to vice as a part of the whole economy of causes and effects.

In his discussions on Ethics, Wolf has not only given rules for self-knowledge, but has also, by way of promoting our knowledge of others, introduced some physiognomical remarks, which were the more ingenious because he anticipated Lavater, who at a later period elaborated the theory of physiognomy, in which, however, he is said to have had less confidence in after-life. Our author’s ethical system has been objected to as liable to difficulty on account of a certain vagueness and indetermination attaching to his fundamental idea of “perfection.” His system certainly seems to want something more definite in another respect—that which relates to the means of exciting a moral impulse that shall sway the conscience, a faculty which, though so important in the sphere of “practical” philosophy (in the German sense), he has not dwelt on to the extent that might have been desired. His moral philosophy may be said to have a considerable tendency to *endemonism*, the perfection of happiness being apparently made the end of man’s existence, rather than that goodness which draws happiness in its train ; but Wolf’s ethical system would be most unfairly treated if it were confounded with the utilitarianism of later times.

Wolf’s *Jurisprudence* naturally partakes of his ethical theories. He considers natural right as resting on the same foundation as moral law, in so far as both tend towards perfection. Every right has its corresponding duty, and right must have duty as its foundation. The aim of all law should be to advance the human species towards perfection, by a constant progression ; and if the whole race is thus to go on from perfection to perfection, then the same moral idea must prevail in the commonwealth as in the mind of the private individual ; “every one in the community should do that only which the perfection of his own condition and that of others unitedly involves and demands, and should refrain from doing that which would make his own

* Gen. xviii. 25.

† Eph. vi. 1.

condition unitedly with that of others more imperfect."* Every man has originally the same rights with every other, in the highest perfection; but in the State every one can only lay claim to a perfection of right conformable to his position, since the very nature of an organic union of individuals implies that, among the several members and their particular callings, the greatest multiplicity and diversity should exist, though without injury to the most harmonious order of the whole. No man, therefore, should either do or forbear doing anything thoughtlessly, or without an express purpose; as every rational purpose will subserve the last and highest end of social life, the perpetually growing perfection of the human race.†

Wolf has been blamed for having comprehended under jurisprudence certain rules which belong only to morals, and with having too often subjected the principles of natural right to the maxims of the Roman law. We are not disposed to detain our readers with a detail on this point; but to whatever extent our author may here have erred from love of the theory, there is no doubt that he was one of those writers who gave a new impulse to the study of jurisprudence in Germany by the elevated aim which he assigned to it, the place he demands for it among the moral and political sciences, and the general interest which he contrived to throw around it.

Our voluminous and indefatigable author also treats copiously of *Political Philosophy*, under which he discusses the domestic, social and governmental relations, the rights of the sovereign, the executive authority, and international law, including the rules of war. He lays the foundation of political science, as applied to civil communities in the maxim: "Do whatever the common safety and the common good require." That is the best government which most efficiently tends to this issue. He considers the monarchical form as most calculated to fulfil the above axiom, though he admits that it has certain drawbacks. His notions on government are not always quite consistent with themselves—certainly not always such as to suit our English ideas: and this we need not regret; for he denies to subjects, as such, the right of examining what the general interest demands, and reserves this right to the sovereign. He does, however, limit by the laws the right of the sovereign to do what he deems the public weal to require. Political economy is another topic under this head, and here Wolf handles various points relating to the well-being of society in general—such as the wealth and power of nations, and the means of their advancement. But many of his views on these subjects show that, in his day, political

* Politik, oder Vernünftige Gedanken vom gesellschaftlichen Leben der Menschen im gemeinen Wesen, § 1.

† Ibid.

economy was quite in its infancy, and that his ideas respecting it were chiefly influenced by what then existed, and not so much by a wide survey of the future destinies of society. Still, Wolf did good service by including among subjects which called for philosophical treatment, matters which up to that time had been considered as limited to the cabinets of princes, and hardly open to public discussion. He, at all events, secured a place for the political sciences which should open the way to their impartial and thorough investigation.*

Those among the Germans who have taken the least favourable view of Wolf's labours have represented his philosophy as consisting merely of such fragments from the system of Leibnitz as were most capable of a popular exposition, the more strictly speculative parts being less brought into notice; so that the more recondite points have been too much ignored. The modern idealists regard Wolfianism in the light of a popular eclectic dogmatism, couched under an artificial imitation of the mathematical method, though the author himself sometimes admits that mathematics and philosophy are very different sciences; since mathematics can demonstrate the general conception of the pure form out of every intuition of the single object;† while philosophy, on the other hand, can render the sensuous appearance an object of intelligence only out of the pure conceptions which belong to the supersensual being—soul or mind. The ideal school regards Wolfianism as by no means satisfying the demands of science, and as having obtained the popularity which it acquired in all the seats of learning in Germany solely from its meeting one want, at least, the want of some regular system: it was therefore accepted in the absence of a system of a higher order, and it produced no inconsiderable revolution in the republic of letters. Wolf may be said to have spent his life

* M. Degérando, an elaborate historian of philosophical systems, praises Wolf's "practical" philosophy, for "the vast extent of its plan, its general harmony, its noble tendency, its abundant promises: its point of departure is human freedom, perfection is its aim, nature is its type, disinterestedness its condition, the connexion of rights and duties its result." But Degérando thinks that in the execution, Wolf often disappoints the hopes he had raised in the minds of his readers. He is also one of those who view Wolf's and Leibnitz's doctrine of volition as tending to an objectionable necessity. "Elle (La Philosophie Pratique de Wolff) trompe trop souvent dans l'exécution les espérances qu'elle avait fait naître. Ainsi la liberté s'évanouit sous l'efficacité des motifs déterminants, dont les effets, aux yeux de Wolff, sont inévitables. Aussi a-t-il partagé les reproches dirigés contre Leibnitz, et a-t-il été accusé, comme celui-ci, d'introduire une sorte de nécessité dans l'empire de la volonté humaine."—*Histoire Comparée*, tom. viii. p. 31.

† That is, in German phrase, the properties belong to the general conception of the pure form (*schema*), which can never be reduced to intuition (*anschauung*), the properties, for instance, of the plane *triangle*: but any particular empirical intuition, any plane triangle, of any form or size, will suffice as the means of the general demonstration.

in explaining and defending the principles of his school; for he was ever ready to enter the polemical arena against its adversaries. The rigid order and the close concatenation of his method was an imposing feature of his writings, and from him may be traced the practice of treating every branch of knowledge in mathematical forms which became current throughout Germany. Croon, Kelsh, Stellwaag, Wasser, Feyerlin, Hagen, and others, all wrote in favour of this method. It was applied to theology, to the instruction of youth, and to the teaching of Hebrew: in short, it became general. Poppe, Hismen, and Basedow, at length, put a check to it by their remonstrances.

The difficulty which we have had to encounter in the attempt we have made to give some account of Wolf's views, may be seen from the following passage of Brucker:

"Wolf possessed a clear and methodical understanding, which by long exercise in mathematical investigations, was peculiarly fitted for the employment of digesting the several branches of knowledge into regular systems. The lucid order which appears in all his writings generally enables his reader to follow his conceptions with ease and certainty through the longest trains of reasoning. But the close connexion of the several parts of his works, together with the vast variety and extent of the subjects, renders it impracticable to give a summary of his doctrines."*

We will add a brief quotation from Tennemann, the well-known historian of philosophy, who (after speaking with approval of Wolf's definite method, order, precise distinctions, and improved terminology,) remarks:

"The errors of his philosophy consist in his taking mere thinking as his point of departure; overlooking the difference between the formal and the material conditions of thought; his regarding philosophy as the science of the possible so far as it is possible; making the principle of contradiction the ultimate principle of all human knowledge; in his placing mere ideas and verbal distinctions at the commencement of every inquiry; his drawing no limit between rational and experimental knowledge; his confining the activity of the mind to the phenomena of perception; and in his neglecting to distinguish the peculiarities which separate mathematics and philosophy both in their form and matter."†

The above criticism is for the most part correct: we may state, however, that it is taken from the Kantian point of view, which was destined soon to become almost the exclusive one in Germany. The Wolfian philosophy reached its culminating point while its author was Professor at Marburg, from 1723 to 1740. A reaction had shown itself before his death, in 1754.

* *Historia Critica Philosophiæ*: vid. *Wolfius*.

† *Grundriss*, s. 425.

It had, indeed, previously begun to wane, from various causes—the overwrought formalism of its demonstrations, its dogmatic attempts to answer all objections, the pedantry of many of its advocates who tried to reduce the simplest truths to logical demonstration, the introduction of Locke's writings into Germany, the eclectic spirit which ensued; but the rise of Kant, the greatest of the German metaphysicians, and the rapid progress of his philosophy, finally overthrew it.

Wolf was much addicted to the exact sciences; but he made no discovery. His chief merit, here, was as a teacher. His course of mathematics long remained the most complete ever published in Germany; but in this science, the most concise of all by its very nature, he did not fail to manifest his tendency to prolix diffusion. Into philosophy he introduced many new terms of technical meaning from the Greek language, which have been retained by his successors. His German works are usually considered as the best-written; and the language is indebted to him for the facility he has shown it to be capable of, in expressing by German compounds the Latin terms and phrases which had before been employed. This coinage of new words, however, renders a vocabulary sometimes desirable to the uninitiated reader; and this aid has been rendered by the author, at the end of such of his works as seemed to require it. His Latin works are not much to be praised, either for his choice of words, for his adherence to the classic sense, or for general excellence of style.

We close by stating that we are not aware of any edition of Wolf's whole works having been published since his death. The edition of 1739 came out, in octavo, at Breslau. Ludovici wrote a digest of his philosophy, and Hartmann published an introduction, but we have not met with either of these works. Meissner composed a philosophical lexicon, for the explanation of Wolf's system from his German writings. Biographies of him were written by Gottshied and Büsching.

ART. IX.—THE ASYLUMS OF ITALY, GERMANY, AND FRANCE.

NOTES OF A VISIT MADE IN THE YEAR 1855.

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(Continued from page 547.)

Asylum of Florence.—The Royal Asylum or hospital for the insane of Florence, Leghorn, and other departments of Tuscany, is situated within the walls of Florence, near the Porta St. Gallo, and is a dependency of the great general hospital, the “Arcispedale di Santa Maria Nuova.” It accommodates both sexes, and its inmates are divided into two classes of pensioners, or paying patients, and one of paupers.

It is under the superintendence of two physicians, one of whom, Dr. Bini, is the director, and the other, Dr. Cardini, the “adjoint.” They are assisted in their duties by an apothecary and by several “internes.” The building, originally designed for a monastery, is ill-adapted for an asylum in its internal structural arrangements, and still more so in its want of any sufficient airing-courts, exercise-ground, and gardens. It was converted to its present use about seventy years since; its defects are recognised by its medical officers, and a building in lieu of it has been proposed in the country, but many years will probably elapse before this desirable and much needed removal is carried out. Indeed, the political position of the Government of Tuscany and the want of means are in themselves formidable obstacles to the prosecution of any large plans for the amelioration of the condition of the insane. All sorts of difficulties encompass even the minor attempts at improvement and reform in the existing asylum; some originating from its dependence both in its administration and funds upon the general hospital; others from the non-medical authorities who specially govern it, for the signatures of some four or five persons are needed to guarantee the smallest expenditure for any improvement or alteration, and therefore, as may well be supposed, it is a sufficiently arduous task to persuade so many independent authorities of the purpose and utility of any plan proposed. The existing structure is rightly fitted to accommodate not more than 350 patients, but the increasing demand for admission for several years has caused it to be crowded with above 400, and at times with more than 500. Some three months before my visit, in June, 1855, this crowding had reached a maximum, when the cholera broke out among the inmates, and carried off 106, of whom two-thirds were females.

And it is worthy of remark, that this devastation was on the most crowded and the worst built side. No new case had occurred for three weeks; the disease was chiefly confined to this hospital, and did not spread among the inhabitants of the city.

The building is tolerably regular in construction, consisting of two divisions, with a chapel between them. Each section forms a hollow square of about 100 feet, around a court or exercising ground. The general elevation is of two stories; the walls of stone, and well constructed. On one side the building and the chapel is the public street; behind there is a garden, occupying above an acre, cultivated as a kitchen and pleasure garden by the patients; and on the outer side of one division is another plot of ground, partly paved, but generally laid down in grass, and planted with an avenue of acacias. The enclosed square courts are paved, and have neither shelter nor seats for the patients.

On the ground floor the rooms open on one side a wide corridor; but on the floor above, the corridor is central, with rooms on each side. The dining and day-rooms for each division occupy the ground floor, together with the bath-room, the kitchen, the visiting, or general amusement-room, and some dormitories and cells for epileptic, refractory, and dirty patients. The floors of the corridors and bath-rooms, and those on the ground floor generally, are of stone; in the rooms above, of tiles.

Most of the windows look into the central courts; they are all barred with vertical iron bars. The single rooms have each a window on one side of the door, of about 18 inches square, and $4\frac{1}{2}$ feet from the ground, filled with crossed iron bars. This serves as an aperture for inspection. Beneath it is a recess, closed by a door opened from the corridor, intended for a cupboard to keep the patient's clothes in when taken off at night.

The rooms constructed for a single inmate are spacious, and afford accommodation for two-thirds of the patients; but it is much to be deplored that, owing to the crowded state of the hospital, they are for the most part, except indeed in the wards for the refractory, occupied by two patients. The evils and dangers of this proceeding do not seem to have struck the medical directors of the Italian asylums, since, as we have already noted, the same plan is pursued at Genoa. The prisonlike character, too decidedly conveyed by the narrow limits of the asylum, by its bare walls and barred windows, is much aggravated by the open iron doors of many of the rooms and of the corridors, and by similar doors, not much improved in appearance by the substitution of wooden for iron bars, on the staircase landings, and at some other parts.

The dormitories are few in number, but contain a considerable

number of beds. On the female side there are three, holding each 20 patients. In one of these the windows are placed between 9 and 10 feet above the floor, and it consequently has a heavy, gloomy aspect, more suited to a prison than to an asylum. After the outbreak of the cholera among the females, one dormitory and some small chambers, where the disease particularly prevailed, were given up, and in lieu of them, a large ward was taken into use, capable of accommodating 50 inmates.

The bedsteads in general use are of iron, and of the common form. Those occupied by epileptics are furnished with sides, to prevent their falling out during a paroxysm. No injury from these sides has been witnessed.

Except for dirty and destructive patients, the bedding consists of a paillasse, a flock-bed, sheets, a woollen quilt or blanket, with a cotton coverlet. For those of dirty and destructive habits, similar beds were in use, but instead of a flock-bed and paillasse, the latter only was afforded them. No special beds were provided for paralytics; indeed, the adoption of water and of spring-beds may be said to be confined to British asylums. Certainly the number of paralytics in the Italian asylums I visited was small, and the peculiarities and requirements of their condition less understood and appreciated than in this country. Bed-sores were looked upon as unavoidable, attention to changing the position being the chief measure relied on for their prevention and relief.

The sleeping-rooms were clean, in good order, and generally free from smell; their walls coloured, mostly white-washed. The dormitories and corridors are imperfectly lighted by small lamps during the night, and an attendant keeps watch. No padded-room existed, but seclusion in a darkened chamber for a brief period was resorted to as a means to calm and repress patients under maniacal excitement.

A common dining-room and a common sitting or day-room belonged to each division. The latter was partially separated into three apartments—for the convalescent clean and orderly, for the refractory, and for the demented. The dining-room was a long room, bare and uncomfortable in appearance, as likewise was the sitting-room. No attempt to cover and vary the bare whitewashed wall with pictures or otherwise was made; no provision of settees or comfortable chairs for the weak, no books or amusements were to be seen, to relieve the monotonous, unoccupied, and dreary life of the unfortunate inmates—that is, those of the indigent class, whose accommodation has hitherto been particularly spoken of.

The dining-tables had a cleanly look, their top being formed of a variegated marble slab, defended by a wooden frame against fracture or other damage. The meals are eaten with forks and

spoons, knives not being allowed, chiefly from being unnecessary, since the food is broken up by stewing, or by its preparation in the shape of soup. Were it not so, knives would be little patronized, the custom of the poor being to employ their fingers and the direct action of their jaws to effect the severance of any victuals calling for division before deglutition.

On the female side there is a needle-room, in which a considerable number of the women are daily employed; but for the men no occupation, except, indeed, for a few in the small garden, is provided. The advantages of workshops are thoroughly recognised by the physicians, but their efforts to make the ruling powers think with them have hitherto been all in vain.

There is a small common or visiting-room, in which patients receive visits from their friends, and where occasional dances are held, for a small and select number, in which the two sexes join.

The pensioners enjoy certain advantages both with respect to diet and accommodation; when quiet, the windows of their bedrooms are furnished with curtains, they have a better made bedstead, superior bedding, a table, and generally drawers, with a chair or two, necessary minor articles of furniture, and a few ornaments. They dine together in a common room; their table is covered with a cloth, and each has his napkin for use. Their sitting-room is also common, and is provided with a piano, a small collection of books, and a few articles for amusement. It has, however, the fault of being too small.

The pensioners are, moreover, dressed variously, according to the means and wishes of their friends, whilst the indigent, on the other hand, wear generally a uniform dress provided by the asylum.

The bath rooms are good; there is one on each side of the building. The baths themselves are capacious—7 feet by 3 feet, and $2\frac{1}{2}$ feet in depth, and made of marble. Water, both hot and cold, enters by an opening at the bottom, which also serves for the discharge. The water-cocks of the bath supply-pipes are out of the reach of the patients, and require a key to turn them. The boiler-room is on the female side, adjoining the bath-room, and affords a constant supply of hot water. The douche is sometimes employed as a means of repression, but more frequently a small stream of water is let trickle upon the head when the patient is placed in a warm bath. Shower-baths, of the English fashion, are here, as elsewhere on the Continent, not in vogue; a sort of substitute is sometimes resorted to by screwing a “rose” upon the end of a douche-pipe.

No system of bathing, as a means of cleanliness, is pursued, and lavatories with soap and towels are among the things unthought of.

The ventilation of the building is left to the natural currents of air by the doors, windows and corridors; and, excepting a stove in the large dormitory used as an infirmary, no means of warming are in existence. Certainly, the climate of this part of Italy renders any general plan of heating a public institution unnecessary, yet I am persuaded that, for a short time in winter the presence of a stove in the eating and sitting rooms would be both agreeable and advantageous to the inmates. For it will be readily granted that the sufferers from mental disease, by reason of their usually feeble and oftentimes sluggish circulation, require the cherishing influence of warmth even more than the sane.

The kitchen is of good size and well managed. It has one of those excellent Italian cooking stoves, built up in its centre, with hot-plates and small boilers on all sides, rendering the processes of cooking simple and easily performed. A scullery adjoins the kitchen. The provision is apportioned by the cook and assistants, and then distributed in the dining-rooms to the patients.

The chapel is conveniently placed between the two sections of the building. It is divided into two portions, one for each sex, chiefly by the high-altar, and a screen extended from it on each side, so that those seated before and behind it cannot see each other. Each sex enters into its allotted half by a door opening immediately into the respective corridor. The chapel is well-kept and ornamented in the manner usual to Roman-Catholic places of worship. Altogether it must afford to the unfortunate lunatics an agreeable and useful change from the dull wards which they generally occupy.

The "moral treatment" can necessarily be but very indifferently carried out in an asylum so destitute of the requisite means; where an excessive number is crowded within its walls; where the opportunities for employment and amusement are so few and incomplete, and where the number of attendants is so small that thirty patients or upwards are allotted to the charge of each. (The whole number of attendants, I was told, did not exceed fourteen.) It will, therefore, surprise no one to learn that mechanical restraint, of much severity, is often resorted to, and held to be a necessary adjunct to the treatment of the insane. It is employed for the furious to restrain them from harming others, for the suicidal to preserve them from self-injury, for the restless at night to confine them in their beds, and for the destructive to impede their propensities. Having these various objects in view, sufficient occasions are found by over-tasked, ill-educated, and ill-paid attendants for its use. Yet, notwithstanding the aid of all this coercion, an English superintendent would be ill enough pleased to have an equally noisy population, untidy and ragged in dress, and prone to destruction and mischief.

In fact, not a few were ragged and disorderly in dress, and some bare-footed. But further, the apparent liberty to relieve the bladder and to spit at pleasure about the corridors, was another practice very revolting to our advanced ideas of asylum propriety and discipline.

Although compelled to notice these defects in the Florence asylum, it is, at the same time, due to the able and well-intentioned medical staff to state that they cannot be held entirely accountable for this state of things. For, as we set out by observing, they are not free and independent agents in conducting the asylum, but the servants of an impracticable non-medical board; and further, they are under the influence of the prevalent doctrine of their country of the necessity of restraint, and have had no means of learning those multitudinous expedients for lessening and abolishing it, which are so familiar that they seem to come almost intuitively to the mind of an English asylum superintendent. For example, the use of strong dresses for tearers, or of peculiarly fastened boots for those who will keep none on, has never suggested itself. Moreover, the position of the asylum within the walls of a large city, its circumscribed area, the absence of means for employment and amusement, and the consequent entailment of an indolent, monotonous life on the inmates—rather calculated to foster the delusions of many of them than to eradicate them, are clearly adducible as circumstances extenuating the blame which would otherwise attach to the medical officers on account of the unsatisfactory condition of the institution. To these impediments to the existence of a well-conducted asylum should be added another, which must exercise a potent effect, and probably is at the root of all the rest, viz., the deficiency of funds, or more correctly, perhaps, the niggardly manner in which they are doled out for the purposes of the institution, especially when any alteration or improvement is projected.

Still we should regret to see money expended on the present building, since no expenditure could ever render it a fitting habitation for the care and treatment of the insane. On the contrary, what is needed, is an entirely new building, erected in the open country, replete with every necessary internal arrangement, and surrounded with ample fields and gardens. And no difficulty could be encountered in finding a suitable site for such a new institution in this delightful Florentine territory, where nature lavishes every charm of scenery and vegetation to solace and cheer the broken spirit and to calm the troubled breast.

To revert, however, to details of moral management as they exist. Mechanical coercion, as already intimated, is largely resorted to; for, although limited as far as thought practicable and advantageous, twenty-five patients were, at the time of my

visit, placed under it. This was in the day-time, for at night the number is very much increased, restraint being resorted to for those thought suicidal or dangerous to others, as well as for the restless and destructive.

Restraint is accomplished by chairs, on the model of those for which St. Luke's Hospital once claimed the merit of invention, but slightly improved upon by the Florentine mechanics. According to precedent, they were made of stout wood, had the usual hole in the seat, to add to their other useful purposes that of a water-closet; on this the patient was fixed by sundry belts,—varying in number and strength according to the supposed exigencies of the case, by the closed foot-board in front, and by the strong wooden flap falling down over the knees, and serving at will either as the trencher on which to place the victuals, or to repose the elbows when the sufficient amount of liberty was accorded to the hands. The improvement on the old model consisted in the foot-board (in front of the legs) being made oblique instead of vertical, so that a little more space was allowed to stretch out the legs. This advantage was, as most will think, unfortunately counteracted by another contrivance,—no doubt the pride of its inventor, viz., the perforation of the foot-board by holes at proper distances, so that straps might be passed through them to attach the ankles of the occupant of the chair, and in that way prevent the somewhat unpleasant drumming with the feet with which he might be disposed to entertain his neighbours. Nor was the luxury of leather padding to the chair denied to those who might not duly appreciate the *dolce far niente* of sitting on a sort of night-commode by the hour or day, and improperly abuse the chair by blows, whether of arms or head.

Lastly, care was taken by placing three or four of them in a row, that no patient should be alone in the privilege of occupying one of these chains.

Thus much has been said about the restraint-chair, since its use still lingers in several Continental asylums, and some of our readers, especially the younger portion, may never have had an opportunity of seeing that ingenious contrivance in this country.

Besides the chair, other instruments of restraint were in vogue; viz., the hand-muff, camisole, and belts. The muff in general form resembled that heretofore used in English asylums, having, however, certain peculiarities of construction. It consisted of a piece of stout leather, large enough to envelope the hands and wrists, the edges being locked together. Previously to placing this round the hands, these were fastened together by a belt, acting like a hand-cuff. At times, hand-cuffs, or manacles made of leather, were resorted to in lieu of an ordinary belt; at others,

the hands were fastened to a belt worn round the waist, or enclosed in thick leathern gloves. These various contrivances, including the camisole, for exercising mechanical coercion, admitted, by their number, of several variations and combinations which it is unnecessary to specify.

The belts, muffs, and gloves were extended to night as well as day use; and, in addition, not a few cases were found which it was deemed necessary to secure in bed, by means of straps to some part of the bedstead.

This asylum of Florence afforded me an opportunity of seeing a barbarous piece of mechanism, contrived in the last generation by, we are sorry to believe, an English physician, intended both to detect feigned insanity and to cure the actual disease. This apparatus was the "whirling-chair." A small room was occupied by it and the mechanism to turn it. It may be found described and figured in one or more English books on insanity, to which we must refer those curious to learn more about it.

Latterly, I was happy to hear it had been totally disused, and trust its existence within the asylum will never suggest its re-employment. If it be worth while to preserve it as a curiosity, it would be much better to find it a place in some museum of antiquities, among the devices of the ancient Inquisition.

Dr. Cardini informed me that in some two or three instances this whirling-chair had appeared of service, but that in almost all he believed it to be mischievous.

A few more particulars will complete our account of this asylum. Soup, as elsewhere in Italy, constitutes the staple article of diet, and is taken usually at every meal, made with or without meat. Bread is also largely eaten, and is of very good quality and white. Meat, boiled usually, but sometimes roasted, enters into the dietary every day in the week, Fridays excepted. The œsophageal tube is very rarely resorted to in forced feeding.

Comparatively few cases of general paralysis or of epilepsy occur in the establishment—a fact well shown by the statistical tables which we append.

TABLE I.

Movement of the Population of the Asylum from the 1st of March, 1841, to the 31st of December, 1851, inclusive.

	Men.	Women.	Total.
Remaining, March 1st, 1844 . . .	177	210	387
Admitted . . .	1215	1051	2266
Discharged { cured . . .	523	404	927
{ relieved . . .	116	103	219
{ uncured . . .	86	80	166
{ found not insane . . .	94	74	168
Dead . . .	357	352	709
Remaining, Dec. 31st, 1851 . . .	215	250	465

TABLE II.

Movement of the Population in the Two Years 1852 and 1853.

	Men.		Women.		Total.					
	1852.	1853.	1852.	1853.	1852.	1853.				
Remaining, January 1st .	215	...	226	250	...	247	465	...	473	
Admitted . . .	172	...	164	147	...	132	319	...	296	
Discharged {	cured .	56	...	47	47	...	64	103	...	116
	relieved .	16	...	14	23	...	11	39	...	25
	uncured .	21	...	15	26	...	9	47	...	24
	not insane .	21	...	19	8	...	6	29	...	25
Dead	47	...	54	46	...	36	93	...	90	
Remaining, 31st Dec. 1853	228	...	241	247	...	253	473	...	494	

The three following statistical tables refer to certain questions less fully illustrated in asylum reports in general—viz., to the numbers admitted, discharged, and dead, in different months and seasons of the year :—

TABLE III.

Admissions between 1844 and 1853, inclusive.

	Men.	Women.	Total.		Men.	Women.	Total.
In January .	101 ...	94 ...	195	In July . .	178 ...	165 ...	343
February .	120 ...	83 ...	203	August .	156 ...	137 ...	293
March .	120 ...	95 ...	215	September	114 ...	109 ...	223
April . .	152 ...	102 ...	254	October .	110 ...	120 ...	230
May . .	154 ...	124 ...	278	November	112 ...	76 ...	188
June . .	173 ...	156 ...	329	December	80 ...	81 ...	161

TABLE IV.

Discharges between 1844 and 1853, inclusive.

	Men.	Women.	Total.		Men.	Women.	Total.				
In January .	69	...	49	...	118	In July . .	96	...	104	...	200
February .	49	...	57	...	106	August .	83	...	108	...	191
March .	73	...	52	...	125	September	126	...	74	...	200
April . .	75	...	63	...	138	October .	113	...	82	...	195
May . .	87	...	63	...	150	November	92	...	83	...	175
June . .	80	...	63	...	143	December	94	...	60	...	154

TABLE V.

Deaths between 1844 and 1853, inclusive.

	Men.	Women.	Total.		Men.	Women.	Total.				
In January .	46	...	48	...	94	In July . .	33	...	30	...	63
February .	24	...	35	...	59	August .	37	...	30	...	67
March . .	36	...	29	...	65	September	32	...	36	...	78
April . .	26	...	19	...	45	October .	45	...	43	...	88
May . .	27	...	31	...	58	November	60	...	44	...	104
June . .	34	...	40	...	74	December	56	...	54	...	110

Table III. shows a rapid rise in the number of admissions with the onset of the hot weather of summer in both sexes. The three hottest months, June, July and August, exhibit the highest, and November, December and January, the lowest number. The next Table conveys no very distinct facts; the most prominent is that the largest number was discharged in the latter summer and the autumn months, between July and November. Still the value of this fact is but small, since no information is given respecting the condition of those discharged, or the proportion of cured and uncured. Lastly, the table of deaths shows clearly the fatal effects of the cold of winter upon the insane, and affords a sufficient contradiction to the ancient tradition of their immunity from atmospheric variations, and particularly from cold. The three coldest months, November, December and January, stand first in order, and next after these, the hot summer and the variable autumnal months, when, besides mere atmospheric heat and cold, other morbid influences start into activity, especially in warmer climates such as Italy.

TABLE VI.

Proportion of Cures and of Deaths between 1850 and 1853, inclusive.

	1850.		1851.		1852.		1853.	
	Men.	Wom.	Men.	Wom.	Men.	Wom.	Men.	Wom.
Remaining, January 1st, 1850	226	277	238	289	215	250	226	247
	503		527		465		473	
Admitted	191	142	183	162	172	147	164	132
	333		345		319		296	
Cured	64	56	86	74	56	47	47	64
	120		160		103		111	
Uncured and discharged as not insane	59	26	62	64	58	57	47	26
	85		126		115		74	
Died	56	48	58	63	47	46	54	36
	104		121		93		90	
Remaining, December 31st, 1853	238	289	215	250	226	247	241	253
	527		465		473		494	
Ratio of Cures per cent. to Admissions	33·5	39·4	46·9	45·7	32·5	31·9	22·5	48·4
	36·3		46·3		32·2		37·5	
Ratio of Cures to entire Population	15·3	13·3	20·4	16·1	14·4	11·8	12·5	16·8
	14·3		18·3		13·1		14·4	
Ratio of Deaths to Admissions	29·3	33·8	31·6	38·8	27·3	31·9	32·9	27·2
	31·2		35·7		29·1		30·4	
Ratio of Deaths to entire Population	13·4	11·4	13·7	13·9	12·1	11·5	13·9	9·4
	12·4		13·8		11·8		11·7	

TABLE VII.

Form of Mental Disorder of those admitted between 1850 and 1853, inclusive.

	Males.	Females.	Total.
Idiocy . . .	31	26	57
Dementia . . .	134	132	266
Stupidity . . .	33	22	55
Monomania . . .	45	38	83
Melancholia . . .	123	113	236
Mania . . .	141	139	280
Acute delirium . . .	8	5	13
Moral insanity . . .	18	25	43
Paralysis of insane . . .	53	7	60
Epilepsy . . .	46	33	79
Simulated insanity . . .	20	1	21
Delirium tremens . . .	4	0	4
Febrile delirium with miliaria . . .	3	3	6
Insanity not proved to exist . . .	61	39	100

Under the head of Monomania, M. Bini has referred all cases of partial insanity (delirium), not associated with timidity, sadness, or despair,—the characters of melancholia.

TABLE VIII.

Form of Mental Disease of those remaining in the Asylum, December 31, 1853.

	Men.	Women.	Total.
Idiocy . . .	18	25	43
Dementia . . .	115	123	238
Stupidity . . .	8	9	17
Monomania . . .	14	13	27
Melancholia . . .	16	8	24
Mania . . .	29	46	75
Moral insanity . . .	0	2	2
Paralytics . . .	6	3	9
Epileptics . . .	32	16	48
Convalescent . . .	3	7	10
Found not insane . . .	0	1	1

Of these, 335 are reckoned as quiet patients, and 159 as excited or refractory; 169 are stated to be dirty in habits, and 280 capable of work. The proportion of quiet and refractory cases in the two sexes is about equal, but that of females of dirty habits slightly exceeds that of males. The number of pensioners of the first class is only 18, and of the second class 24; the bulk of the asylum population being made up of the pauper or indigent class, 494 in number.

TABLE IX.

Of the Social Condition of the Patients, December, 1853.

	Men.	Women.	Total.
Single . . .	188	145	333
Married . . .	44	83	127
Widowed . . .	9	25	34
Total	241	253	494

TABLE X.

Ages of those admitted between 1850 and 1853, inclusive.

	Males.	Females.	Total.
Under 10 years . . .	7	4	11
From 10—20 . . .	61	47	108
20—30 . . .	191	156	347
30—40 . . .	160	111	271
40—50 . . .	143	118	261
50—60 . . .	65	80	145
60—70 . . .	51	49	100
70—80 . . .	28	14	42
80—90 . . .	4	4	8
Total	710	583	1293

TABLE XI.

Physical Causes of the Mental Disorder in Cases admitted between 1850 and 1853, inclusive.

	Males.	Females.	Total.
Defect of cerebral development . . .	36	21	57
Traumatic injuries of skull . . .	28	5	33
Sanguineous congestion and apoplexy . . .	10	9	19
Epilepsy . . .	58	49	107
Exposure to sun . . .	21	3	24
Abuse of wine and spirits . . .	112	22	134
Abuse of tobacco . . .	28	—	28
Venereal excess . . .	19	1	20
Prolonged use of mercury . . .	17	3	20
Prolonged use of quinine . . .	2	1	3
Masturbation . . .	30	8	38
Pregnancy . . .	—	5	5
Childbirth . . .	—	15	15
Dysmenorrhœa and amenorrhœa . . .	—	22	22
Change of life . . .	—	2	2
Lactation . . .	—	12	12
Typhoid fever . . .	4	5	9
Intermittent fever . . .	3	2	5
Miliaria . . .	3	9	12
Suppression of habitual discharges . . .	8	3	11
Decrepitude . . .	8	11	19
Pellagra . . .	20	16	36
Hereditary predisposition . . .	172	159	331

TABLE XII.

Moral Causes of the Mental Disorder in Cases admitted between 1850 and 1853, inclusive.

	Males.	Females.	Total.
Want	51	29	80
Mental distress, not well defined	66	66	132
Political changes	23	3	26
Fear	30	35	65
Love, disappointed	26	47	73
Jealousy	6	15	21
Offended self-love	12	1	13
Disappointment	7	1	8
Outrage on modesty	—	3	3
Domestic indifference—ennui	30	44	74
Domestic troubles	13	23	36
Scruples of conscience	29	37	66
Failure in business—reverses of fortune	41	13	54
Gaming	5	—	5
Imprisonment	12	—	12
Excessive study and novel reading	4	1	5
Excessive joy	—	1	1
Unascertained	78	98	176

TABLE XIII.

Occupations of Patients admitted between 1850 and 1853, inclusive.

Men.	Women.
Peasants and labourers 247	Peasants and labourers 177
Independent persons 43	Occupied in domestic labour 119
Shopkeepers 34	Cooks, tailors, shoebinders 60
Shoemakers 15	Servants 49
Soldiers 15	Independent 26
Scriveners, or lawyers 21	Weavers and needlewomen 25
Hatters 12	Straw-hatmakers 23
Agents—(<i>facchini</i>) 13	Shopkeepers 6
Sawyers 12	Nuns 4
Bricklayers 12	Of other occupations 2, 3, or 4
Musicians 10	of each 16
Seamen 8	Without occupation 78
Barbers 7	
Coachmen 6	
Engravers 8	
Priests 10	
Monks 7	
Cooks 10	
Advocates 5	
Of all other trades, some 3,	
4, or 5 of each 136	
Employment not known 35	

TABLE XIV.

Causes of Death from 1850 to 1853, inclusive.

	Males.	Females.	Total.
Epileptic fits	6 ...	5 ...	11
Acute delirium	6 ...	1 ...	7
Sanguineous congestion of head	11 ...	17 ...	28
Encephalitis	6 ...	2 ...	8
Cerebral hæmorrhage	11 ...	5 ...	16
Serous effusion in head	43 ...	32 ...	75
Pneumonia	11 ...	14 ...	25
Pulmonary gangrene	6 ...	3 ...	9
Phthisis	16 ...	15 ...	31
Cardiac disease	4 ...	8 ...	12
Pleuritic effusion	6 ...	3 ...	9
Hydropericardium	0 ...	2 ...	2
Asphyxia	1 ...	1 ...	2
Diaphragmatic hernia	1 ...	0 ...	1
Tabes mesenterica	7 ...	2 ...	9
Chronic diarrhœa	31 ...	25 ...	56
Cirrhosis	0 ...	3 ...	3
Ascites	2 ...	0 ...	2
Softening of spleen	0 ...	1 ...	1
Peritonitis	14 ...	15 ...	29
Dysentery	4 ...	1 ...	5
Chronic cystitis	1 ...	0 ...	1
Miliaria	1 ...	3 ...	4
Hydræmia	6 ...	6 ...	12
Scurvy	1 ...	6 ...	7
Marasmus from fasting or anæmia	12 ...	14 ...	26
Typhoid fever	5 ...	5 ...	10
Pellagra	2 ...	2 ...	4

TABLE XV.

Relapses among those admitted from 1850 to 1853, inclusive.

	Males.	Females.	Total.
Admitted for the first time	516 ...	421 ...	937
Re-admitted after relapse	109 ...	100 ...	209
Re-admitted after discharge as not cured	54 ...	45 ...	99
Re-admitted after discharged as "not found insane"	31 ...	17 ...	48

Upon a review of these several tables, a few facts worthy of attention will strike the reader. The number of males admitted exceeds that of females, which would seem to show a greater proclivity to insanity among the former. Again, if in the relative number of the two sexes there is a similar preponderance of males over females in the population of Tuscany to that found in England, then the proclivity of the male sex appears still more

pronounced. But another fact comes out which would not *a priori* be anticipated—viz., that the female population of the asylum, notwithstanding the smaller number of the sex admitted, exceeds that of the male, and augments in an increasing ratio year by year. To what is this attributable? It is to the fact that the ratio of deaths and of cures to the entire population has been smaller among the women than the men, consequently the former have accumulated in successive years above the latter in number, as chronic or incurable cases. This less curability of insane females and their less mortality are facts opposed to the generally received statements, as well as to the statistics of most asylums, and would seem to indicate the operation of some special causes at the Florence asylum.

The mortality during the first year after admission, by reason of the acute and recent nature of many of the cases, will necessarily be larger than in subsequent years. At Florence the mortality in relation to the number of admissions appears very high—viz., about thirty-one per cent., and yet, as a table supplied by M. Bini shows, it is more favourable than at several other Italian, German, and French asylums. Calculated upon the whole number of inmates, *i. e.*, those remaining at the commencement of any year added to those admitted in the course of that year, it is reduced to between twelve and thirteen per cent.

On referring to Table VII., showing the form of malady of those admitted in the course of four years, it is clearly seen how large a number of cases, hopelessly incurable or having but slight chances of cure, is received, composed of idiots, demented, epileptic, and paralytic patients—a number which must very materially interfere with the proportion of cures effected. From a comparison of the number of cured, considered according to the form of their malady, with the number of each variety existing, at the end of the year, M. Bini thus represents their curability per cent.—

Dementia	7 to 8 per cent.
Stupidity	22 to 29 „
Monomania	30 to 36 „
Melancholia	39 to 46 „
Mania	34 to 42 „
Moral insanity	65 to 68 „

The smaller ratio of cures in cases of mania than might be expected from the statistics and observations of most physicians (which show that when acute and treated early they are recoverable in a large proportion), M. Bini accounts for by the circumstance that it is the practice to retain lunatics under observation in the general hospitals for a time before sending them to the asylum, during which some few get well, whilst in most the

chances of cure are lessened by the detention and absence of appropriate treatment.

The relative fatality of the several forms of mental disorder is thus expressed per cent. :—

Idiocy	9 to 12 per cent.
Dementia	24 "
Stupidity	29 "
Monomania	4 to 7 "
Melancholia	11 to 17 "
Mania	10 to 12 "
Paralysis of insane	60 to 72 "
Epilepsy, with insanity	20 to 25 "

These calculations, however, both with respect to the curability and to the mortality of the several phases of mental alienation are merely approximative, since they require to be made not only for one or two, but for a series of years, on the plan pursued of taking the number of cases of each particular form existing at the commencement of any particular year, adding the number of cases admitted within the year, and then calculating from the number of deaths the proportion per cent. of the mortality under that form.

The prevalence of the general paralysis of the insane is greater in Tuscany than most writers on the Asylums of Italy have represented. M. Bini states it to be about eight per cent. among the men and one per cent. among the women in his establishment.

The proportion of relapses to the admissions is between fifteen and sixteen per cent., or, when compared with the cures, thirteen per cent.

From the table (X.) exhibiting the ages on admission during four years, the largest number of cases appear to occur between the twentieth and thirtieth years, *i.e.*, at a decennial period earlier in life than that shown by the statistics of France and England—viz., that between 30 and 40. However, if it be taken into consideration that the whole number of persons between 30 and 40, in any population, is smaller than that between 20 and 30, then although the recorded number of insane patients be absolutely smaller, yet, relatively to the population, the proportion is greater even in Tuscany, and still greater in this country, where of the actual number of admissions the largest belong to the later decennial epoch. Again, the high number of admissions at the more advanced period, between 40 and 50, falling little short of that seen between 30 and 40, should be remarked as indicating even a somewhat larger proclivity to mental disease.

Owing to the many difficulties of obtaining accurate histories of cases, and of eliminating apparent or assigned causes, often rather the symptoms of the malady, the statistics of the causes

are always very uncertain and of comparatively small value. From those extracted from M. Bini's reports, physical causes are shown to preponderate greatly.

The tables of the occupations and conditions in life of those admitted show that by far the greatest number come from the peasant and labouring classes, a fact which might be anticipated from their large number relative to the entire population of a country. Still there are not sufficient data to show how far as a class they are prone to insanity proportionately to other classes, unless statistics were prepared to exhibit their relative number to the whole population.

On reviewing the assigned causes of death as set forth in the tables, a few only appear to preponderate at all largely over the rest in the long category. Phthisis, which figures so extensively in English reports among the causes of death in the insane, occupies quite a second-rate position in the annals of the Florentine asylum. During a period of four years, and in an average population of nearly 500, only 31 of 405 deaths from all causes are attributed to that disease. This proportion would appear to be less than that occurring among the citizens of Florence, and is accounted for by M. Bini by the circumstance that a large number of the patients in the asylum are country labourers, little predisposed to pulmonary consumption. Serous effusion on the head occupies the highest rank among the assigned causes of death; but, in our opinion, this abnormal condition is very rarely a primary cause of death, but a secondary effect of debility and exhaustion, and instead of enumerating the 75 deaths as instances of serous effusion, we feel that they should rather count as deaths by exhaustion. The 12 deaths attributed to hydræmia should likewise, in all probability, enter into the same category, the watery condition of the blood being the predisposing cause to serous effusion on the head.

Lesions of the abdominal viscera stand next among the causes of death, chronic diarrhœa having ended fatally in 56 cases. To peritonitis 29 deaths are referred in the course of the four years; however, it was very unequally prevalent in these several years. Thus no death from it occurred in 1850, whilst 15 happened in 1851, in 1852, 10, and in 1853, 4. The fatal outbreak in 1851 M. Bini attributes to the sudden variations of temperature which characterized that year, and against which no sufficient protection was offered by the clothing of the patients.

The large number of unmarried among the inmates of the Florence Asylum is very striking, being somewhat more than double the number of married and widowed together. The value of this fact is much lessened by our not knowing the statistics of the population at large in reference to their social

condition. The large number (169) of patients dirty in their habits reflects much on the management of the asylum, being more than a third of the whole number of inmates. Great allowance must, however, be made for the medical officers, from the almost insuperable difficulties under which they labour from an over-crowded, ill-built, and ill-arranged asylum, without space for out-door employment or amusement, and with a most incomplete staff of attendants.

From the number, 280, considered capable of work, M. Bini presses upon the Florentine government the necessity and the advantages of providing means for their employment; and we trust his appeal will not be in vain.

We perceive that the Government has proposed to convert the Villa di Castel-Pulci, situated on a most agreeable hill, not far from Florence, to the purposes of an additional asylum to relieve the over-crowding of the present one of St. Boniface, in the city. For this intended improvement we must be thankful; but at the same time, we are bound to express our conviction that this conversion of an unsuitable building to the purposes of an asylum, will be attended with great cost, and be always encumbered with numerous defects and disadvantages, which the construction of a special building would at once obviate.

At Sienna is another Tuscan asylum, intended for the departments of Sienna and Grossetano. It is called the Hospice of St. Nicholas, and is situated within the walls of the city, close to the Porta di Roma. The building it occupies was formerly a monastery. I did not have the opportunity of visiting it, but understood from Dr. Cardini, that it was moderately well conducted, although, as a building, ill-adapted, and destitute of any ground for the exercise and amusement of the inmates.

At a short distance from Lucca is the asylum of Fregonaja, standing on the side of a pleasantly sloping hill. Since I saw it only in passing along the road, I am enabled to state nothing further respecting it, than that it is a three-storied modern building, having a centre and two wings, with a small space behind it, laid out in airing-courts, the whole walled in. The surrounding country is very beautiful, and no exception could be taken to its position, but I heard that it was in a very indifferent state.

ART. X.—ANNUAL MEETING OF THE ASSOCIATION OF MEDICAL OFFICERS OF ASYLUMS AND HOSPITALS FOR THE INSANE.

THE annual meeting for 1857 was held in London, on the 2nd day of July, at the Great Western Hotel, Paddington; Dr. Hitchman in the chair.

The following officers were present :

Dr. Hitchman, President for the past year.

Dr. Forbes Winslow, President Elect.

Dr. Thurnam, Ex-president.

Wm. Ley, Esq., Treasurer.

Dr. Bucknill, Editor of the *Journal*.

Dr. Campbell, } Auditors.

Dr. Prichard, }

Dr. Lockhart Robertson, Honorary Secretary.

And the following members and visitors :

F. D. Walsh, Esq.

Dr. Fayrer.

Dr. Sutherland.

Dr. Sankey.

Sir C. Hastings, M.D., D.C.L.

Dr. Donald Mackintosh.

Dr. Sherlock.

Dr. Lowry.

Dr. Kirkman.

J. Terry, Esq.

Dr. Chevallier.

Dr. Manley.

T. N. Brushfield, Esq.

Dr. G. Stilwell.

Dr. Monro.

Dr. Harrington Tuke.

J. Millar, Esq.

Dr. Davey.

Dr. Boisragon.

Dr. Stevens.

J. Cornwall, Esq.

Dr. Paul.

Dr. Burnett.

R. Gardiner Hill, Esq.

T. Allen, Esq.

J. G. Symes, Esq.

F. D. Tyerman, Esq.

Dr. Arlidge.

W. G. Marshall, Esq.

W. Hans Sloane Stanley, Esq.

A. Richards, Esq.

Dr. O'Connor.

Dr. Tate.

Dr. Wood.

Dr. Blandford.

H. Sankey, Esq.

Dr. F. K. Fox.

Dr. Willett, &c., &c.

The minutes of the preceding meeting (1856) were taken as read and confirmed.

The Chairman (Dr. Hitchman), in resigning the office of President for the past year, made the following address :

“Gentlemen,

In resigning again to your trust the office of president, which I have had the honour to hold during the past year, I beg to state that no incident demanding a special report from me has

transpired, except the proceedings of the Society in reference to our associate, Mr. Millar. That case is, I believe, as well understood by the members as by myself, and yet a recapitulation of the chief facts may not be irrelevant to the business of the meeting. In Sept., 1856, Mr. Millar published a pamphlet detailing the perpetration of an act of injustice by the Committee of the Bucks Asylum. So unjust was the conduct of the Committee, as related by Mr. Millar, that men were reluctant to believe that a body of English gentlemen could be capable of such proceedings. The Association shared in this doubt. The superintendents of asylums had had large experience of the high character of the English magistracy, and had found in them a chivalrous sense of honour, and a love of open, even-handed justice and manly candour; and an especial abhorrence of mean, clandestine, and anonymous charges. They hoped, therefore, that the Committee of the Bucks Asylum would be no exception to this rule, and that the Committee would accord to Mr. Millar the right of meeting his accusers, of knowing the charges, and hearing the evidence which was brought against him. For my own part, I strongly believed this, because I knew the chairman of the Bucks Committee to be a gentleman thoroughly conversant with business, long and intimately accustomed to the management of public societies of a scientific and benevolent nature. I had heard his character portrayed in high terms, and, moreover, knew him to be associated by relationship and intimacy with a family for whom I have great reverence. I felt that all the facts were not before the public, and prior to calling upon the Association to protest against the proceedings of the Committee, I addressed the chairman. Subsequent events proved that I had erred in my opinion, and that sufficient allowance had not been made by me for the contagiousness of passion, and the fanaticism of corporate bodies. The following fact would be incredible, were not Mr. Millar in possession of the minute to vouch for its accuracy:

“19th Sept., 1856. *Extracts.*—At a meeting of the Committee, present, Thos. R. Barker, Esq., chairman; John Lee, Esq., LL.D., Christopher Tower, Esq., W. Lowndes, Esq., T. T. Bernard, Esq., C. T. Gaskell, Esq., J. T. Senior, Esq., W. Pennington, Esq., the Rev. A. P. Cust, the Rev. C. E. Gray, the Rev. R. Townsend,—*Resolved*, ‘That it is the opinion of this Committee that the application made by Mr. Millar, for an extract of that part of Mr. Carrington’s letter, on resigning his office of chairman of the Committee of Visitors of the Lunatic Asylum, dated 8th January, 1856, and entered on the minutes of the Committee, on the 15th January, 1856, be not acceded to.’”

And the following is a copy of another extract in Mr. Millar’s possession:

“At a meeting of the Committee of Visitors, held on the 24th Oct., present, Thos. Raymond Barker, Esq., J. Lee, Esq., LL.D., William Lowndes, Esq., C. Tower, Esq., C. T. Gaskell, Esq., J. T. Senior, Esq., T. T. Bernard, Esq., the Rev. C. E. Gray, the Rev. A. P. Cust—Mr. Millar applied for a copy of the charges made against him, which led to the resolution passed by the Committee on the 29th August last. The Committee decline to furnish the same.”

On the reception of the letter from the Bucks Committee, disdaining to answer the simple inquiry which was made to it, the Committee of this Association felt that the time for a public remonstrance had come, and the protest which nearly all the members have subscribed was the result. As I adopted, rather than composed that remonstrance, I may be permitted to state that it was drawn up with much clearness and force, and received the approbation of nearly every member of the Association. Two or three gentlemen, from motives which I am not at liberty to explain, hesitated to attach their names to it, but from every superintendent (with one exception only) I received a courteous reply to my application for his signature.

Perhaps no document ever elicited so much unanimity of opinion. It was posted to every magistrate in the county of Bucks, previous to their meeting at Epiphany Sessions. Mr. Millar has stated, that it was only on the day of the Session, namely, Jan. 5th, that he was supplied with a copy of the charges preferred against him. To these charges Mr. Millar has since published a “refutation,” which has been read probably by all the members of the Association. These must have rejoiced to find, that, notwithstanding all the aspersions which have been made upon Mr. Millar by a Committee of the Bucks Asylum, imperfectly acquainted with the proper management of a lunatic asylum, that Her Majesty’s Commissioners in Lunacy, skilled and experienced in such matters, have since given public testimony to the value of his services, and to the creditable state of the institution. And while the Commissioners have done this, his professional brethren have, upon public grounds, and upon public grounds alone, come forward to protest against the injustice with which he has been treated, and to bestow upon him their sympathy and their aid.

For myself, I have seen Mr. Millar but once, and then only for a few minutes; yet I rejoice at the manner in which he has passed through this persecution, and beg to congratulate him upon the high position which he now holds in the opinion of his professional brethren, and in the estimation of the Commissioners in Lunacy, and of this Association. Few men have had the good fortune to be thus supported, when calumny and injustice have fallen upon them. Sustained by the inner consciousness of

having acted well, such praise and such sympathy are a deep consolation and a rich reward ; a guerdon of honour to himself, and a brand of perpetual shame to those who have wronged him."

Dr. Hitchman then resigned the chair to Dr. Forbes Winslow, the President Elect, who, in taking the chair, delivered an address, which we publish in another part of this *Journal*.

TREASURER'S REPORT.

Mr. Ley proceeded to read the Treasurer's Report.

Receipts and Expenditure for the Year ending July 1, 1857.

RECEIPTS.			EXPENDITURE.		
	£	s. d.		£	s. d.
By Balance in the hands of the Treasurer	27	18 4	By Annual Meeting, 1856	1	5 0
By Annual Subscriptions paid to Treasurer	95	11 0	By Printer's bills for Journal Numbers, 18, 19, 20, 21	108	4 11
By Annual Subscriptions paid to General Secretary	10	10 0	By Official Notices, &c. Postage	1	7 4
By Annual Subscriptions paid to Irish Secretary	4	4 0	By Expenses of President's Remonstrance in the Case of the Bucks Asylum	9	11 8
Subscriptions to Journal	3	4 6	By Expenses of Irish Secretary	0	4 0
			„ „ General Secretary	4	19 6
			„ „ Treasurer	0	19 6
			By Balance in hand of General Secretary	5	10 6
			By Balance in hand of Treasurer	9	5 5
Total	£141	7 10	Total	£141	7 10
Correct.			D. C. CAMPBELL, THOMAS PRICHARD, } Auditors.		

The expenses had been very similar to those of the previous year, and the receipts were much the same. The report of the treasurer's accounts and expenses had been audited by the auditors, who would pronounce an opinion as to its correctness. The only point to which he had to call attention, as being something unusual, was a matter which had taken place at the last meeting. A committee was then appointed to act in cases of emergency (not formed from the whole body), but when it might be for the interest of members generally, they had power to call them together. That committee had acted in the case of Mr. Millar through the President, and some slight expenses were incurred, which received the President's signature, and the auditors thought it right to pass the account, which was made out separately, though it was but small, because the auditors, collectively, felt they could not say that the accounts were made up in the same way as in the former year. There was a balance in hand of 14*l.* 15*s.*, and about 60*l.* outstanding debts. Many of the members had come forward to double their subscriptions, some honorary members had sent in two guineas instead of one,

not knowing whether they were to pay for a future year; and in all cases there was an expression of good will that left no question as to the disposition to keep up the subscription. With reference to the balance which was due to the treasurer, a great part of it had not been asked for. He could, with propriety, repeat the expression which he had made use of at the last meeting, as to the perfect success of the society.

Dr. Campbell begged to observe that as to the accounts, he thought it would be found that a great number of subscribers were in arrears; some had not paid up their subscriptions for two years, some not even for three years. He recollected that two years ago a motion was made, that unless the subscriptions were sent in and paid for the two years, notice should be sent to the parties so in arrear, and if, after notice so sent, the subscriptions were not paid, the defaulters' names should be struck off the roll of members. He thought the names of persons in arrear should be struck out after three years.

The President asked whether Dr. Campbell had any intention of making a motion to that effect.

Dr. Campbell said he would move, "That those who should not have paid up their subscriptions for two or three years, after notice being sent (if necessary), in two or three months, should have their names struck out."

Dr. Hitchman: There was a rule in respect to such cases.

Dr. Robertson said it was provided under Rule V.,

"That any member in arrear of his subscription more than twelve months after the expiration of the year for which it becomes due, and more than three months after application by the Secretary for the same, shall cease to be considered a member of the Association, provided no reason satisfactory to the annual meeting be assigned for the non-payment of such arrears."

Dr. Campbell would then simply move, "That the fifth rule of the Association be enforced;" and the motion being seconded, was carried unanimously.

Dr. Burnett begged to move, "That the treasurer's report be received."

Dr. Sherlock seconded the resolution, which was carried unanimously.

Dr. Sutherland begged to propose a vote of thanks to their late President. That gentleman had first raised the office of President to the dignity which it had now acquired; and he had by his admirable conduct in the chair, raised this institution very much in the eyes of the public. He thought the committee which had been established last year was of much use practically, and that the Association had much need of it in this way, that it was a check upon those who, as Dr. Winslow had said (and

there were those persons), did not understand them. Unless they went together, they might have to encounter, not only cases like that of Mr. Millar last year, but others; and they might be liable to be crushed as an association formed for the most beneficent of purposes.

Sir Charles Hastings said it was with the greatest pleasure that he rose to second the vote of thanks to Dr. Hitchman.

The President having put the question, it was carried by acclamation.

Dr. Hitchman begged to tender his best thanks for the very kind manner in which the members of the Society had received the last resolution. He was indeed happy to find that his services had been deemed acceptable to the Society, and had elicited their so cordial approbation. As far as his efforts enabled him, it would be the dearest joy of his heart to see the Association prosper; and he hoped that feeling might be carried out which had been so eloquently referred to by their President.

ELECTION OF OFFICERS.

The President said the next business was the election of officers. They must first elect a *President* for the next year, and it would be open to any member to propose a gentleman for that office.

Dr. Bucknill rose and said: It fell to him to propose the name of a gentleman for President next year, who, he was sure, would reflect great honour and dignity on this Association. Important as this Institution had now become, still the presidency of a gentleman who stood so high, not only in this country, but throughout the world, in connexion with the treatment of insanity, he felt assured they would, in common with himself, regard as an event which would reflect honour upon and promote the interests of their Association. He meant Dr. Conolly. He believed it had been suggested that the Association should meet next year at Edinburgh. He mentioned this, it was true, incidentally, and perhaps it was not the right time to mention it; but the Association would probably meet at that great seat of learning and science, the capital of the north; and it seemed to him very important that they should there have at their head a man of Dr. Conolly's eminence, and that they should go with a staff of officers as strong as possible, in order to make the best of that occasion. He felt it quite unnecessary to eulogize Dr. Conolly, his name was so well known to all the gentlemen present, that he should content himself by proposing that Dr. Conolly be their President for the year ensuing.

Dr. Hitchman had great pleasure in seconding the proposition that Dr. Conolly should be the President for the ensuing year. The position of Dr. Conolly, his European fame, and the great-

ness of his character, eminently fitted him to promote the interests and dignity of this Institution. While some names needed elaborate eulogy, Dr. Conolly's name had ever been a household word with them all. By his earlier pursuits, he had fitted himself for the great task of enlightening the ignorant, soothing the sorrowful, and promoting the cause of truth. Let them look to his brilliant career at Hanwell. The Hanwell reports marked an epoch, they unfolded great facts in language of which the literature of the country might be proud. His able work on asylums and their management, he thought, stood as a monument of his fame. He therefore had great pleasure in seconding the resolution.

The proposal was carried by acclamation.

The President: The general way of proceeding was, after electing a President for the next year, to select *the place of meeting*. Therefore it was desirable to decide now where they should meet next year.

In answer to a question, Dr. Lockhart Robertson read Rule XII.

"PLACE OF MEETING.—That the annual meeting be held either in London, or, if so agreed at the preceding meeting, or after circular to each member, in some provincial town or city where, or in the neighbourhood of which, there is a public asylum, or where some other object is likely to attract the members."

The President desired to know whether it was the pleasure of the meeting that the place of meeting should be Edinburgh, if the British Medical Association went there.

Dr. Stevens said he really did not like to hear their place of meeting spoken of in connexion with the possible movements of any other institution. He knew it was very inconvenient for many members of the profession to go to Edinburgh. He would therefore propose as an amendment "That they do meet in London."

Dr. Bucknill said that this was a matter which he thought ought to be decided by vote, being one in which the convenience of the majority of the members should have the greatest weight. He would therefore suggest that it would be best to vote as between London and Edinburgh, with the proviso that the British Medical Association met there.

Dr. Lockhart Robertson then moved, "That the annual meeting for the year 1858 be held in Edinburgh."

The President observed, that it was clear that Dr. Conolly had been elected President for next year; and the next question was, Where should they meet? He thought that Dr. Conolly would think it a great compliment that they should go, under

his presidency, to Edinburgh to meet the British Medical Association ; not that they should go in their tail, but *pari passu* with them. He thought they would materially reflect importance and dignity on each other. He would further recall attention to the fact, that they had among their body many very eminent gentlemen in Scotland, and he thought they should turn their steps occasionally in that direction. It was a pity to confine themselves to England. If those who were members of the British Association, as well as of this, went to Edinburgh, it would be a good opportunity for this Association. But the question was in the hands of the meeting.

Dr. Bucknill said he should second the motion of Dr. Lockhart Robertson, that they should meet in the city of Edinburgh next year.

The President said he had now to put the motion which had been made by Dr. Robertson, and which had been seconded by Dr. Bucknill, "That the annual meeting for the year 1858 be held in Edinburgh." On the question being put, there appeared for the motion, 17, against it, 3.

The President said he thought they might now congratulate themselves on having passed that resolution. The meeting would now proceed to *the election of a Treasurer*.

Dr. Robertson said he had the honour to propose Mr. Ley as Treasurer of the Association. No one of the officers of the Association had so often as himself come into contact with that gentleman, from the very nature of their respective offices. No man could devote more time and care to the funds and the interests of the Society than Mr. Ley. He had therefore great pleasure in proposing him as Treasurer for next year.

Dr. Boisragon seconded the motion, which was carried unanimously.

The President : They had now to proceed to another important business, and that was to elect *an Editor of their Journal*.

Sir Charles Hastings had great pleasure in proposing Dr. Bucknill as the Editor of their *Journal* for the ensuing year. That gentleman carried out the objects of this Association in the best manner, and he edited the *Journal* without any exclusive views.

Dr. Monro seconded the motion. He would only say that he could scarcely conceive a scientific *Journal* which could be more ably conducted.

The question being put, was carried with acclamation.

The President : They had now to elect Auditors.

Dr. Robertson said the Auditors were Dr. Campbell and Dr. Prichard ; one of these gentlemen was re-eligible, but that the other must retire. Dr. Campbell had given extreme satisfaction,

he understood Mr. Ley's mode of carrying out the accounts, and he hoped that Dr. Campbell would again be re-elected as one of the auditors.

Dr. Prichard declared he should much prefer Dr. Campbell being re-elected to himself.

Dr. Robertson : The rule was, undoubtedly, that one was re-eligible and that the other retired.

Dr. Prichard said he would at once retire, in order to secure the re-election of Dr. Campbell, who was so well acquainted with Mr. Ley's mode of keeping the accounts, and he begged to second the motion for his re-election.

Dr. Sherlock proposed Dr. Stevens, of St. Luke's, as the other auditor ; and the motion having been seconded,

The President put the question, that Dr. Campbell and Dr. Stevens be the Auditors for the ensuing year.

Carried unanimously.

The next business on the paper of agenda was the election of a *General Secretary*.

Dr. Hitchman proposed Dr. Lockhart Robertson as General Secretary for the ensuing year.

Dr. Tuke felt great pleasure in seconding the motion.

The question being put, was carried unanimously.

The President said they had now to elect two other Secretaries—one for Ireland, and another for Scotland.

Dr. Bucknill proposed that Dr. Stewart be re-elected the Secretary for Ireland. Dr. Stewart is a gentleman who has taken a most active interest in the welfare of this Association. That interest he still retained, and he much regretted that from an accidental circumstance he had not been enabled to be present on that day. The fact was, that he had not been informed of the day of meeting sufficiently soon. He believed his absence would be generally regretted ; and he would have been with them, he was sure, if he could.

Dr. Robertson with much pleasure seconded the motion. By an oversight of the printer's, Dr. Stewart had not received the intimation of the day of meeting until it was too late for him to be present. He had received it only two days before. He was requested by Dr. Stewart to convey to the meeting his extreme regret that he had so been prevented from being present.

Mr. Ley proposed, and Dr. M'Intosh seconded, that Dr. Browne be re-elected Secretary for Scotland.

NEW MEMBERS.

The President said they had now to proceed to the election of New Members, and perhaps he might be allowed to propose as an honorary member of the Association, one of the most distin-

guished psychologists of France, who had paid the Association the compliment of coming over from Paris to meet its members. He referred to Dr. Brierre de Boismont, whose name must be as familiar to them as a household word, a man of European fame, of great personal worth, and of high attainments. He (the President) thought they would be guilty of an act of discourtesy if they were to overlook the fact he had stated, and not elect this gentleman one of their honorary members. They had no rule as to distinguished foreigners, but if he were the first they elected, they could not have selected a better man. He begged to propose this eminent man's name first in the list of honorary members to be this day elected.

Dr. Sutherland said he had much pleasure in seconding the proposition of the President. Dr. Brierre de Boismont had told him that he was most anxious to be introduced to the Association, but he was sorry subsequently to hear that he would not be able to be present at this time.

The question was put by the President, and was carried unanimously.

Dr. Robertson proposed as an honorary member, Mr. Hans Sloane Stanley, the Chairman of the Board of Visiting Magistrates of the Hants County Lunatic Asylum, who wished to become one of the honorary members of this Association. He hoped that if ever a future chairman of the Bucks Asylum took as high a position, they would elect him also.

Dr. Hitchman begged most cordially to second the nomination of Mr. Stanley. He occupied a great position, and the fact of Mr. Stanley coming forward, reflected honour on the Association which received him as an honorary member.

Resolution put and carried unanimously.

Mr. Stanley begged to acknowledge the great honour which had been paid him by the members of the Association, in electing him into their valuable Society. During the time he had served as Chairman of the Committee of Visiting Magistrates of the Hants County Asylum, he had always felt a deep interest in the progress of this Society. He had subscribed to the *Journal*; and though he could not say he had read all the various papers with which it was filled, yet he had read enough to excite his deepest sympathy in the institution, and to make him wish to become a member. He trusted that the harmony which existed between the committee over which he presided and the medical superintendent was so well established, that no such circumstances as those which had been referred to by the late President would arise. Such was the cordial feeling between their Committee and Dr. Manley, though they had different duties to perform, they would respectively carry out those beneficial improvements

which were suggested, from time to time, in the treatment of those unfortunate persons who were placed under their care. He had not come there, however, to make a speech, but as a listener, and a promoter of that science for the furtherance of which they were assembled together.

The President: They had now twenty-five ordinary members of the Association to propose; and what he would venture to suggest would be, that the Secretary should read over the names, with the names of the proposers and seconders, and that then, in order to save valuable time, they should elect them *en masse*.

Dr. Robertson then read the following list:—

ORDINARY MEMBERS.

1. Richard Adams, Esq., M.S. Cornwall County Asylum, Bodmin.
2. J. Bartlett, Esq., Sussex House, Hammersmith.
3. J. J. Blake, Esq., M.B., Essex County Asylum, Brentwood.
4. Dr. Blandford, 7, Grove, Brompton.
5. Dr. Dillon, V.P. Ballinasloe District Asylum, Ireland.
6. Dr. Duncan, Farnham House, Finglas, Ireland.
7. Dr. Francis Fox, }
8. Dr. Charles Fox, } Brislington House.
9. F. Gould, Esq., County Asylum, Hants.
10. J. Hawkes, Esq., Wilts County Asylum, Devizes.
11. Dr. C. Howden, the Royal Lunatic Asylum, Edinburgh.
12. J. Humphrey, Esq., M.S. Bucks County Asylum, Aylesbury.
13. W. Langley, Esq., Rivertop House Asylum, Uxbridge.
14. Dr. D. M. M'Cullough, the Royal Lunatic Asylum, Edinburgh.
15. Dr. Peppard, Bushy Park, Limerick.
16. J. Philipps, Esq., Bethnal Green, London.
17. Dr. Rogan, M.S. to the Londonderry District Asylum.
18. Dr. Andrew Ross, Portsmouth.
19. Dr. Stilwell, Moorcroft House, Uxbridge.
20. J. P. Symes, Esq., Devon Branch Asylum, Exmouth.
21. Dr. Tanner, Charlotte-street, Bedford-square.
22. Dr. Tate, St. Luke's Hospital, London.
23. R. Walker, Esq., County Asylum, Chester.
24. F. Wilton, Esq., County Asylum, Gloucester.
25. Dr. Andrew Wynter, Brompton.

The President put the question, whether it was the pleasure of the meeting that the gentlemen whose names they had heard read should be elected ordinary members?

Dr. Davey rose to propose Dr. O'Connor. He was not engaged in their particular department of the profession, but he was much interested in the treatment of the insane, and he wished to become a member.

Dr. Robertson said he had to state that when this gentleman's

name was brought before the Committee, an objection was taken to him, from his not being specially engaged in this department of medicine. The rule, as relating to members, was, "That the Association do consist of medical officers of hospitals and asylums for the insane, public and private, and of legally qualified medical practitioners, otherwise engaged in the treatment of insanity."

The President: In whatever might be done, he begged to say, on behalf of the Association, that there was no personal feeling towards Dr. O'Connor. The rule, as read by the secretary, existed, and it was a stringent one, and one which they were bound to adhere to. He was sure that Dr. O'Connor would see that, in adhering to the prescribed rule, nothing personally offensive was intended to him.

Dr. Stephens would beg to second the name of Dr. O'Connor.

The President: It is necessary to go to the ballot. Dr. O'Connor would clearly understand what was the motive of the Committee in opposing his election. There could be no personal feeling with regard to himself, but if they had a law, he felt they should adhere to it stringently; a principle which, he was sure, Dr. O'Connor would appreciate.

Dr. Thurnam suggested whether a resolution could be put as to adhering to the recommendation of the Committee as to the list of the new members to be elected?

The President: Would any one move an amendment to this effect?

Dr. Robertson then moved as an amendment, "That the recommendation of the Committee, as related to the list of new members, be adhered to."

Dr. Thurnam seconded the amendment.

The question was then put, and on a show of hands being taken, there appeared—

For the amendment	18
Against it	2

Majority in favour of the amendment	16
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The original motion was therefore lost.

ALTERATION OF RULES.

Dr. Tuke said he rose, in pursuance of the notice which he had given last year, to move, "That the names of proposed honorary members be printed, and sent round with the circular convening the meeting of the Association." The inconvenience of the present practice was, that they were not supplied beforehand with the names of the new members to be proposed. He thought it was a bad compliment which they paid to their honorary members to be in ignorance of whom they might be; and, on

the other hand, there was no opportunity to object to persons at the moment they were announced.

Dr. Campbell seconded the resolution, which was carried unanimously.

ACTING SUB-COMMITTEE.

Mr. Ley said he rose to move the re-appointment of the acting Sub-Committee. The matters to which this Committee applied itself were peculiar. Circumstances might arise which would make it desirable that this Committee should act, and summon the general body, when it would be inconvenient to any private member to take that duty upon himself. Thus, they were likely to have questions sent to them during the session of Parliament, when the Society itself would be incapable of acting. In the course of last year they made the President take upon himself the correspondence with the Committee. A small number of persons thus acted together, and agreed on the mode of proceeding. By this means much more work was done than by waiting to have the concurrence of some 120 or 130 persons who were members of the general body. His proposition was, "That the acting Committee of last year be re-appointed."

Dr. Sherlock begged leave to second the motion, knowing, as he did, the admirable manner in which the business of the Sub-Committee was carried on. He sincerely concurred in all that had fallen from Mr. Ley.

The motion was then put. Carried unanimously.

Dr. Tuke having been called upon by the President, proceeded to read the following paper:—

OBSERVATIONS ON THE TREATMENT OF INSANITY, WHEN REFUSAL OF FOOD IS A PROMINENT SYMPTOM.

Mr. President and Gentlemen,—It is not without some diffidence that I venture to bring before this meeting, numbering, as it does, so many of the most distinguished practitioners in our department of medical science, views of my own, on a subject that must be so familiar to them: or that I attempt any description of a symptom of insanity that is so often seen, and which all of us are constantly called upon to meet. But I have found in private practice so great a diversity of opinion amongst medical men as to the treatment of this particular symptom, refusal of food—our text-books on the care and cure of deranged minds pass over the subject as one of so little importance; I have found it so impossible to obtain any information on the point, except scattered through the medical reports of asylums, which our Association may well be proud of, as containing all that is most valuable in the practical treatment of insanity—

that I believe I shall be doing a real service to medicine in bringing the question before this assembly. My own practice is comparatively of little importance: my object is rather to elicit and place on record the opinions of gentlemen so well qualified to pronounce judgment; whose dissent from my views would incite me, and perhaps others, to still further investigation, and whose concurrence in my conclusions would set the matter at rest.

I do not propose in these remarks to bring forward any new theory, or strange method of treatment. My object is to attempt a classification of those cases where refusal of food is a prominent symptom, founded on the real or presumed causes of such refusal: to point out the treatment necessary for each division; to discriminate those in which forcible alimentation is or is not justifiable; and lastly, to point out the various methods that may be adopted for this purpose, and the reasons that have induced me to choose the particular mode of treatment I myself prefer.

I divide those cases in which repugnance to nourishment or inability to take it exists, into five divisions, more or less distinct from each other. Disinclination to food in the insane may arise from—

1. Simple dyspepsia.
2. Delusion as to food itself, or to their power of taking it.
3. Suicidal tendency, or wound of gullet after an attempt at suicide.
4. Stupidity, inertness, idiocy.
5. Special organic lesion in the brain or other internal organ.

I shall consider each of these classes separately, and although these divisions may not embrace all the cases that may arise or have been met with, and one may not often occur uncomplicated with some other, I believe such a classification will be found practically useful, and will, by clearly defining the nature of the case I am speaking of, enable me to defend myself against the charge of erring on the side of those who advocate mechanical interference in all cases where food is refused, or with those who think the forcible administration of food usually unnecessary, or even cruel.

I need not dwell on the first of my divisions; the symptoms are those familiar to the general physician. It is, however, most important that we should recognise the symptom, having the treatment of patients who are so often unable to explain their wants, or justly describe their sensations. Dyspepsia, superadded to chronic mental disorder, will frequently change for a time the character of the disease, induce new delusions, or add strength to old ones. The forcible administration of remedies in these

cases may sometimes be necessary, but of food scarcely ever; and it is terrible to think that we may ignorantly inject into the stomach of an invalid suffering from headache, mania, or gastrodynia, an indigestible meal that will probably add to his sufferings, or even induce severe constitutional disturbance.

I shall not now enter on the treatment of dyspepsia superadded to chronic insanity, a subject I hope to have the honour of bringing before you on a future occasion. It is of frequent occurrence in private practice. It may sometimes induce repugnance to food, endanger life from exhaustion, and require mechanical feeding, but I have never seen such a case; and those practitioners make a grand mistake who sedulously pour gruel or beef-tea down the throats of those unwilling to eat, without investigating the causes of their reluctance. Much mischief may thus be done, and I believe to this indiscriminate use of the stomach-pump the objections that some of our first physicians have to its employment is mainly attributable.

The second group of cases, those in which food is refused under the influence of specific delusion, is the most ordinarily met with, and, fortunately, the most amenable to treatment. Such delusions are not often persistent, and the repugnance to food may usually be overcome by gentle and patient persuasion. Stratagem will often succeed, where you have any clue to the nature of the delusion. Medical treatment will frequently overcome such fancies, and of course obviate the necessity for further interference.

The delusions giving rise to refusal of food are sometimes most ridiculous—more often painfully distressing. The idea of poison being administered is, perhaps, the most common. Patients under my care have frequently refused food for this reason; and would thus, as it were, starve themselves to save their lives. Metallic taste, especially that of copper, is not unusual. There is, probably, always dyspepsia present in those cases, and the deranged secretions should be appropriately prescribed for. I have seen great mischief arise from drugging or tampering with the food of insane patients, a practice too frequently resorted to. A patient so treated will lose all confidence in those around him. In some cases it gives rise to an entire refusal of sustenance; in many it is the origin of these illusions of taste. Of course, I do not mean that such treatment is not sometimes useful. The stomach or the intestines may be the seat of disorder giving rise to this form of delusion. A patient now under my care believes that his stomach is turned inside out. Sometimes this idea will prevent his eating for twenty-four hours; but such abstinence relieves the uneasy sensations, and the use of bismuth and vege-

table tonic infusions prevents the symptom becoming more severe. The delusion itself has existed for ten years.

The idea that voices are heard warning them against food is a frequent and dangerous symptom in deranged patients, often ushering in or attending suicidal mania. In all these cases active medical treatment is most essential. A lady very recently under my care was, at the commencement of her attack, obstinately bent on suicide, requiring the constant presence of an attendant. She was fed with a spoon for several days, but with great trouble and difficulty. She would give no reason for her abstinence. A great amount of nervous tremor, want of sleep, fits of weeping, marked one of those cases, which Dr. Hitchman, of Derby, our last President, has pointed out to us as being so especially benefited by opium. After taking it in the form of Battley's solution for a few days, the repugnance to food ceased. Under the persevering use of this remedy, her melancholy disappeared. She is now rapidly recovering, and tells me that her objection to food arose from imaginary voices thundering in her ears warnings against her taking it, and telling her it was "bathed in human blood."

I need not, before my present hearers, enlarge upon the various recorded plans by which patients have been seduced, or surprised into taking food. Dr. Conolly, in his "Clinical Lectures at Hanwell," used frequently to mention the case of a man who had persisted in refusing food for a dangerous length of time, but at length eat heartily of a mighty seed cake, which the steward, with the view of tempting him, caused to be cut up and distributed in his presence, without any apparent wish that the patient also should share it. This is a useful hint to the practitioner; in such cases too much anxiety defeats our object. An affected indifference will often disarm the suspicions of a patient, and induce him to give up his intended abstinence.

Esquirol pretended to flog a patient of his who obstinately refused food, telling him that if he persisted in acting like a naughty child, he must be treated like one. The expedient for the time succeeded. The Bourbon prince who imagined himself dead, and was induced at last to eat by an invitation to meet some distinguished pretended ghosts, who assured him, by precept and example, that eating was quite compatible with his and their position, is familiar to us all. I question the wisdom of such a plan; and I believe it is recorded, that the poor prince, undeceived as to his companions, at last died a victim to his delusion, and to the prestige of his rank, that interdicted the employment of forcible means of nourishment.

A change of diet, or allowing the patient to choose his own

food will sometimes be beneficial. A young Spanish gentleman under my care would not eat. In the hope of ascertaining the reason of this resolution, I invited him to dine with me. On his plate being handed to him, he rose from the table, pale, trembling, and with all the marks of the most unfeigned abhorrence. "*Mon Dieu!*" said he, "it is a woman's flesh you give me." I had now a clue to his delusion. My suggestion that eggs were not open to this objection was well received. His repugnance to other food soon wore off, and under appropriate medical treatment he rapidly recovered.

Another patient, a boy of eighteen, whose refusal to take solid food began to give me great uneasiness, I induced to eat by inviting him to help me dress some mutton chops, which I affected to take with great mystery from my own larder, in the absence of the cook. He entered into the joke, and, without any pressing, eat more than his fair share; and as he had not tasted food for more than thirty-six hours, I was delighted to see him eat. Badly dressed chops were never, perhaps, so much enjoyed. From this time his recovery commenced, and he is now perfectly well. I mention these cases, because it is obvious that, these plans not succeeding, either of them would have been proper subjects for the forcible administration of food. In their weakened physical and mental condition, a few hours' longer abstinence might have been a serious obstacle to their ultimate recovery.

Sometimes persuasion, with a little gentle force, will induce a patient to take food, in spite of his delusion; and finding no ill result follow, the persistence in abstinence is overcome. But it is only to experienced and kind hands that this experiment can be safely entrusted. No servant should be allowed to threaten the stomach-pump, or to employ even the slightest force, without the presence or the express sanction of the physician in attendance. Ill-judged efforts at feeding increase the repugnance, which tact and gentleness might overcome. Still the more grievous error appears to me to be in delay. The valuable aid of the stomach or nasal-tube is neglected till exhaustion has set in, and even if life be preserved, the mental disorder has become more deeply rooted, and the patient remains a chronic case, to be daily fed, who under early medical treatment would have recovered his mental, as well as his corporeal strength.

Change of scene, and of the immediate attendant, is worthy of trial. I have seen a patient who refused food obstinately in his own sitting-room, dine with appetite in the company of others. Attention to the quality of the food, to the way it is cooked and presented to the patient, is in private practice absolutely essential. I should take care that the soup I was about to inject through

the stomach-pump was well served up, as though about to be taken by myself. I have seen at the last moment a patient elect to eat, rather than be forcibly fed; and he is more likely to do this if the food offered is not a disagreeable mess of beef-tea and gruel, such as he would not have touched when in his usual health.

The third of my divisions—cases in which there is a determination to die by starvation—gives, perhaps, the most anxiety to the medical man. At any moment the desire for self-destruction may take some other form. The great point in the treatment of other cases is to decide when you have carried persuasion far enough, and the exact time at which you must resort to mechanical and forcible feeding. The age, the constitutional strength, the habits of life of the patient, must guide us here. It must be remembered, that if insanity is essentially a disorder of debility, in suicidal cases, as a general rule, there is more particularly an exhaustion of nervous power, and that each hour's delay diminishes the chance of the patient's recovery.

The length of time for which abstinence can be borne is sometimes extraordinary. In one remarkable case, a man existed for seventeen days without food. Captain Chesterton, in his "*Revelations of Prison Life*," gives two instances of voluntary abstinence from food for thirteen days, without injury. I do not myself wait in these cases till the pulse begins sensibly to flag; there is no harm in being too soon. The longest time I have ever ventured to delay has been four days. My usual rule is not to wait more than forty-eight hours.

Long abstinence in some constitutions produces a train of symptoms very apt to mislead the practitioner who has not watched the progress of the case. Excitement comes on, a state analogous to that seen in *delirium tremens*, strange visions pass before the patient, horrible sounds are heard; there is mania without inflammatory symptoms, prostration with excitement. The remedy for this state of things is, the forcible administration of food in small quantities, and even stimulants. The following case illustrates this form of disorder:—

In the summer of last year a lady, travelling abroad, lost her only daughter. Her grief took the form of religious melancholia. She was brought to London to consult Dr. Conolly. Soon after there were several attempts at self-destruction; then an entire refusal of all nourishment. Excitement now came on, with mania such as I have described. At this stage, Dr. Conolly recommended her removal to my house. No food had been taken for two days; for two days more everything but water was refused. Raving continued, but dangerous exhaustion was becoming

evident. On the fifth day we determined on injection of food into the stomach. I sent through a tube introduced through the nostril a small quantity of beef-tea thickened with isinglass, and two ounces of sherry. Within six hours the raving ceased. For three days afterwards food and medicine were taken without much repugnance, but there were frequent attempts at suicide in other ways. Forced nourishment was only once more necessary. The tincture of Indian hemp and opium were freely used in the after treatment; and this lady recovered perfectly, and has remained since perfectly well. Writing to me from Wiesbaden lately, this lady, after many kind and grateful sentences, adds, "To you and to Dr. Conolly I owe my life."

It is singular how long patients will sometimes permit themselves to be forcibly fed, rather than take food voluntarily. I have fed such cases through a tube for many weeks, and cases are on record where it has been necessary to do so for years.

I may mention here, that it is important to vary the aliment introduced. Arrowroot, gruel with or without milk, beef-tea thickened with isinglass, or with flour, or with the yolk of eggs, are all available. To my friend Dr. Hodgkin I owed the suggestion, in one case where feeding was necessary, of pounding roasted chicken in a mortar, adding milk, and rubbing it down to a cream, which passed easily through the smallest tube. Thus imitating, as nearly as possible, the effect upon the food produced by mastication and insalivation. In the case of a patient at St. George's Hospital, whom it was necessary to feed daily for twelve months with the aid of the stomach-pump, a tube of double size was procured; and through this meat and vegetables were passed down the œsophagus, cut up in the ordinary way. The man did not appear to suffer under this treatment. I rather imagine that those cases which the opponents of forced alimentation adduce, of patients who have sunk with symptoms of atrophy and exhaustion in spite of the stomach-pump, have too frequently either been left too long uninterfered with, or have not had a judicious variety of diet. I do not believe that a patient of depressed vital power would live for any length of time upon beef-tea alone, and his sinking would be an argument, not against his being fed by force, but against delay in the first instance, and against the administration of improper and insufficient aliment.

There is one important point to remember in these cases of refusal of food; the intention of suicide will rarely be confessed. If, therefore, the cause of the refusal is not ascertained, you must consider such a patient dangerous to himself, and watch carefully against efforts at self-destruction repeated in some other shape.

As the result of such attempts, wounds of the throat come sometimes under our notice, but more frequently under the care

of the hospital surgeon, as the result of suicidal attempts in *mania a potu*. Mechanical feeding will of course be required, and caution and careful manipulation are essential ; a small tube should usually be employed.

The fourth class of cases is easily disposed of. They are not numerous, their diagnosis is easy, and their treatment obvious enough. In the case of idiocy and imbecility, spoon-feeding will generally answer the purpose. Should it fail, the stomach-tube must be resorted to. Dr. Leon de Verga, usually opposing all attempts at forcibly feeding the insane, excepts this class of cases. "I do not call it, in this case," he says, "forced," but "artificial alimentation." As he admits they should be fed, I will not make any objection to his nomenclature.

Special lesion of the brain, or organic disease of internal organs, occasioning the refusal of food, I have made the last of my divisions. There can be no disorder that requires more careful study, or that places the medical man in a more painful position. On the one hand, interference may add to the agonies of the certainly dying patient ; on the other, how distressing to witness prolonged suffering without an attempt to relieve it.

Instances of disease must too often come before us, in which we are forced to confess how unavailing are all the resources of our art ; but it is a heavy responsibility to doom, by non-interference, a patient to a certain, a painful, and a lingering death, without an effort to save him. And I am by no means certain, that in some recorded cases that have been left to die, the organic changes adduced to support such practice may not have been caused by long starvation. The effect has been mistaken for the cause. The motives of many of those who think the forcible administration of food an extreme measure are worthy of all respect. They shrink from anything like violent or severe treatment, as cruel and unjustifiable. At the same time, I must think them mistaken in their views. Dr. Leon de Verga writes an essay against the practice of feeding a patient contrary to his will. Would Dr. Leon hesitate to recommend tracheotomy, as a last resource, in a child dying with croup ? I think not. And yet the same objections apply, and in a stronger degree. The little sufferer cannot consent, the pain is great, the operation is usually unavailing. In my own practice, if I considered that ulcer of the stomach, or intus-susception of the intestines, rendered alimentation unavailing, I should call in the general physician, or the operating surgeon, and even then urge the propriety of forced alimentation, as affording the last and only chance.

In the case of an old gentleman of weak physical power, who had been long insane, and whom I was attending with Dr.

Hodgkin, we suspected internal cancer. The patient could tell us nothing; he had all the appearance so characteristic of scirrhus disease. He took fluids freely, but obstinately refused all animal or solid food. He had become emaciated to a frightful degree; and, as a last resource, I injected some egg and wine into his stomach, with but little hope of any beneficial result. However, he seemed to rally, and in eight hours I repeated the operation. In the course of a few days he was walking about, comparatively strong. This feeding was at intervals necessary for about a month. He then began to take nourishment as usual, gained flesh, and seemed out of danger. At the end of seven months the same symptoms again appeared. All our remedies failed to do any good, and he died in a state of the greatest emaciation I have ever seen. An examination of the body after death showed us the stomach, reduced to one half its natural size, a thickened band embracing it, forming the appearance known as "hour-glass contraction;" the mucous membrane throughout was pale; the other organs of the body were apparently sound. There was little information gained by the examination of the brain. This gentleman's life was at least prolonged by our treatment; and the only thing to be regretted was, that we did not resort to the forcible administration of food earlier in the first attack.

I had the misfortune to have one very painful case under my care, which I bring before you—first, because it is an example of what I mean by repugnance of food arising from special disease of brain; and secondly, because it is a form of disorder which has been recently exceedingly well described by Dr. Bell; so graphically, indeed, as to have become known in America as "Bell's disease," but which I have never seen noticed before, except in Mr. Ley's Report of the Oxford Asylum for 1854, where he describes something like it as occurring after *delirium tremens*. A young country gentleman, of strong physical power, was brought to my house, suffering under a paroxysm of acute mania. He refused all solid food, though he took some little nourishment in the shape of barley-water, tea thickened with isinglass, and such things as occurred to us at the time. Several of the first London physicians and surgeons saw him with me. Forced alimentation was thought of, but we were agreed as to its being unadvisable, and in ten days my patient sank exhausted. The lungs had been resonant throughout, but breathing had seemed confined to their immediate apices; the respiratory sounds were scarcely audible; there had been intense inflammatory symptoms about the head, but these appeared to yield to treatment, and the immediate cause of death was considered to be pneumonia. On opening the thorax the lungs seemed too

large for their bony cavity; the air-cells were distended, and, although healthy as to structure, were infiltrated in parts with frothy serum. The other viscera were perfectly healthy; the brain was not examined. These conjoined symptoms, functional disease of lung, and repugnance to food, appear to me to point out clearly the nature of the attack—acute inflammation of the membranes at the base of the brain, *involving the origin of the pneumogastric nerve*. The same in a chronic form might explain the want of inclination to food, associated with slow respiration, in some cases of melancholia; but I rather throw out this for the investigation of our Association. I do not wish to start a theory not immediately connected with my subject. The suggestion is, at all events, worthy of consideration; and, as far as I know, the coincidence of the symptoms have not been in any way explained, or even specially noticed. If I saw such a case again, I should recommend counter-irritation to the nape of the neck, and treat it generally as one of inflammation to the base of the brain, without reference to the lung-symptoms.

From the foregoing remarks, it will be easily seen that I hold decided opinions as to the propriety of forced alimentation in most cases of refusal of food, and that I strongly advocate the early adoption of this mode of treatment, before the strength fails, and fatal exhaustion is imminent. I quite agree with M. Emile Blanche, who says, in a letter published in the *Union Médicale*, in answer to some one who had decried the importance of mechanical interference, or in some case had neglected to give it a trial: “*Ce n'est pas sans un douloureux étonnement que l'on apprendra que les médecins en sont encore réduits à rester spectateurs désolés, mais impuissants, de l'agonie des malades.*” It is, indeed, with a sad astonishment I hear forced alimentation objected to by many eminent men; and I believe it is partly because its advocates have not clearly defined the cases where it is essential, have not dwelt sufficiently upon the importance of its early adoption, and have not taken pains to simplify their instruments, and to render the operation of feeding as little as possible distressing to the patient.

Of the various modes of forced alimentation, and of the forms of instrument used for the purpose, I have not now to speak.*

* At the conclusion of this division of his excellent Paper, Dr. Tuke showed to the Association a collection of instruments, and explained the different modes of treatment in use at home and abroad. The members of the Association expressed themselves highly gratified with the Paper, and requested that it might be published *in extenso* in their Journal. This, of course, is a rule with all papers thus submitted to their Association. In the early years of the Association, papers like the above were read at its meetings, to which they imparted a scientific character; but since the resuscitation of the Association, which has taken place during the last four years, no such papers have been read, until Dr. Tuke has this year revived

Dr. Davey said he was sure they were all much indebted to Dr. Tuke for his very interesting paper, but he wished to make two or three remarks upon the subject of compulsory alimentation. Cases had occurred within his own experience where that principle had been successfully carried out. One case he would mention in which such was the determination to resist food, that the patient must have died if she had not been sustained by nourishment supplied through the rectum, but she was restored to health by this treatment. Some five years ago, when he became the proprietor of an asylum, a lady, who for ten years had been kept alive by mechanical appliances, and who died about two years ago, had been fourteen years, although under the influence of powerful delusion, sustained by this means. She was kept alive by the introduction of food into the stomach, not with a tube, but with a funnel which was outside a pipe; the funnel was about the size of two hands, and she was thus kept alive for fourteen years. That was a fact which he considered to be worthy of record. There was another kind of case which bore relation to those mentioned by Dr. Tuke, which came under the head of hysteria, a disorder in girls which sometimes prompts them to refuse food, but to go away and consume food in some corner in secret. In the case he referred to, he accepted as truth what the girl told him as truth; but it came to his knowledge that she did eat on a certain occasion. He acted still upon the patient's assertion as truth, and it was only necessary to apply the remedy once. He said to her, "Will you refuse food? Then you must be fed artificially." She was fed accordingly, and the poor creature never gave him any more trouble. He considered she was cured by the inconvenience to which she was put. It set up a new action in her volition, she took her food quietly, and recovered.

Dr. Wood said, that as a London practitioner he had had a large number of patients who refused their food; and he had been rather startled at hearing such an authority as Dr. Conolly say that it was a rare thing for insane patients to require the application of stomach-pumps. Many curious cases of this character had come before him. It was necessary the first time to observe closely the bodily powers of the patient; and in the second place, to judge whether there were not peculiar features in the case which should lead the medical man to consider whether he ought not to hesitate to introduce food artificially. At the same

the practice by favouring the Association with his excellent and practical essay. The discussion elicited was also in the highest degree valuable and interesting, although it by no means exhausted the subject. Dr. Tuke had only time to read an abstract of the concluding part of his Paper. He has, however, kindly promised to supply us with the whole of the remainder, so that it may be published in our next number.—ED. *Asylum Journal*.

time, it was most important to introduce food at an early period ; it should be determined on as soon as possible. In the criminal department of Bedlam, M'Naughten laboured under this delusion. He took it into his head that he would take no food. He was at the time in good health ; there was no reason for the delusion on that score. He did not appear to be under any other than his ordinary delusion about the Tories having ill-used him, but he resolutely refused his food. He watched him for some days, and at last he became thinner, and eventually he was compelled to use the stomach-pump. He then said to the patient, " You must not die under my hands." He nevertheless still refused his food, and he was fed for about a fortnight, and gained flesh. At last it became almost a matter of joke between him and M'Naughten, who saw his folly, and eventually took his food without any trouble. There was another man in the same department, who, whenever he had to be fed, would be fed by the stomach-pump. He was determined to have his food in no other way, and actually introduced the tube into his mouth himself. There was no reason to oppose him, or he would have starved himself ; and he soon gave up the notion when he found that he was not opposed. After all, the main point which they had to consider was the bodily powers of the patients, and the mode of introducing food must depend upon circumstances. There were sometimes circumstances of difficulty in the application of the stomach-pump ; but with the nose-tube they could not introduce food sufficiently fast. Now, Dr. Tuke had referred to the pounding of meat, and yet the patients' commons might be reduced to pulp without much difficulty. He thought it desirable, also, that the food should not be limited to one kind, except where the patients were fed more than once a day. It was necessary to introduce farinaceous matter, for that they would get fat upon, and it was certainly more easy of digestion. There were patients who would die, let what might be done for them ; but his feeling was that no medical man ought to let them die of starvation ; they were bound to take every means, till they saw a man must die in spite of all their exertions. There was an impression abroad, that where patients were weak it was cruel to force anything in the shape of aliment ; but he thought that, where a patient was dying, they were bound to administer food artificially, where it was necessary. There were many reasons, he contended, for the use of the stomach-pump, and but few for conveying aliment through the rectum.

The President asked Dr. Tuke whether, where a patient obstinately refused food, and struggled violently, and he were put slightly under the influence of chloroform, the patient then became facile to the introduction of the tube ? as in some cases he

believed, where patients struggled excessively, and were brought under the influence of chloroform, the tube was then introduced with comparative ease and success.

Dr. Tuke: There could be no doubt chloroform lessened resistance, and the tube would be more readily handled. Dr. Sutherland had tried this treatment with success. Dr. Davey had cited a case in which he had injected food into the rectum for many months, and the patient recovered. There appeared to him many objections to this practice. Dr. Davey had not stated the reason for this mode of treatment.

Dr. Davey: She was pregnant, and there was constant vomiting.

Dr. Tuke: Then the injection by the rectum was the last resource, and the case hardly bears on the question at issue. It is certain that life can only be supported for a limited period by this mode of nourishment. In cases of hysteria firmness was essential; but, in his opinion, threats should be avoided. Forced alimentation was a remedy, and not a punishment. He had to apologise for the length of his paper, and to thank the members of the Association for their kind attention.

Dr. Wood wished Dr. Tuke to understand that when he once told the patients they were to be fed by the stomach-pump he was not deterred by any consideration whatever in carrying out the threat.

The President had known cases where he had said to the patients that, unless they took their food rationally, the stomach-pump would be used; they have immediately taken their food, and continued to do so without the necessity of using it.

Dr. Tuke would here suggest, that he would not threaten the forcible administration of food unless he had the instrument open by him, to imply, "You mean resistance: I am prepared." He had never found any difficulty from resistance when using the nostril-tube.

Dr. Sherlock said he had known some cases in Edinburgh of delusion, acute excitement, and others, where it was necessary to have recourse to forced alimentation. In many cases where it was formerly used they gave chloroform, and the patients took it themselves; but in a proportion of the cases they only took the forced alimentation under the influence of chloroform.

The President: Dr. Tuke had made some observations upon medicating the food of the patients, a system advocated by Dr. Browne—namely, that of giving jalap in cakes, and senna in tea or coffee. And he also must say that he had seen very disastrous consequences resulting from this practice. The taste became nauseated, the patients soon discovered there was something noxious in their food, and something different from what they

had expected to taste. They thought it extraordinary food, and hence they imagined that an attempt was being made to poison them. He thought that all practitioners should be very cautious how they meddled with such a system, which tended to create obstacles to the recovery of the patients.

Dr. Sankey: As to the administration of food artificially, it might be morally effected by having a large apparatus at hand, without using it; but the more simple the instrument the better. He had had a case where he had recourse to forcing the food. The patient continued in that case for three months with great resolution to refuse food. At last it was found that the application of two spoons was the most effective mode of proceeding—better than any amount of persuasion. One spoon was forced into the mouth to keep it open, and to keep down the tongue. The appearance of a large stomach pump, with its brass fittings, had an effect. The introduction of a tube into the nose might sometimes act well; but two spoons, he was of opinion, were often the best instruments.

Dr. Sherlock said in chronic cases it would suit very well.

Dr. Sankey: If there was a struggle, a gag must be placed in the mouth, and a simple spoon used. He should prefer a wooden one.

Dr. Wood: He presumed that it would take a long time to convey a sufficient quantity of food into the system by the mode now suggested.

Dr. Sankey replied that he would undertake to administer a pint of beef-tea in a quarter of an hour or less.

On the motion of Dr. Bucknill, seconded by Dr. Campbell, a vote of thanks to Dr. Tuke for his excellent paper was carried by acclamation.

The President informed the members that Messrs. Tyerman and Marshall, the Superintendents of the Middlesex Asylum at Colney Hatch, had a communication to make to the Association.

Mr. Tyerman then said that the Committee of Visitors of the Asylum at Colney Hatch had requested him and his colleague to communicate to the Association an invitation to visit and inspect that asylum on the morrow. A convenient train would start from King's Cross at 12.25; and after their inspection luncheon would be prepared for the members in the board-room.

The President said that the Association felt greatly obliged by this courteous invitation, and he did not doubt that many of the members would avail themselves of it.

Dr. Wood observed, that they had had a large and long meeting, and much trouble had been entailed on their respected President, to whom, on behalf of the meeting, he begged to tender their best thanks.

The proposition was carried by acclamation.

The President replied: He accepted the compliment which had been paid him. It was with satisfaction to himself, pride, and pleasure, that he had had to preside over so large and influential a body of gentlemen connected with the treatment of the insane.

Dr. Robertson, on the part of the Committee, gave notice that they would, at the next annual meeting, propose certain alterations in Rule II., and also in the designation of the Association.

The meeting then adjourned.

In the evening, the members dined together in the hotel, and were joined by Dr. Copland, and Mr. Gaskell, one of the Commissioners in Lunacy [an honorary member]. The arrangements of the hotel, the dinner, wines, &c., gave the utmost satisfaction.

THE PRESIDENT'S CONVERSAZIONE.

On the evening of the 1st of July, the President (Dr. Forbes Winslow) received the members of the Association at a *conversazione*, at his residence in Cavendish-square.

THE PRESENT STATE OF LUNACY IN ENGLAND AND WALES.

THE eleventh very able Report recently issued by the Commissioners of Lunacy, presents great variety of interesting and valuable information on the present state and statistics of insanity throughout England and Wales; and cannot fail of being perused with the greatest interest by the psychologist especially, the philanthropist, political economist, and by our readers generally.

This Report brings before us much matter for reflection, both in a moral and social aspect; canvassing on a large and comprehensive scale, yet with clearness and precision, questions and facts of gravest character and importance bearing upon that "most dread affliction," insanity—a malady of already fearfully wide extension, and unquestionably still on the increase.

But were the suggestions and plans of the Commissioners really adopted and carried out, we are sanguine enough to believe that this "direful affliction" might be materially abridged in its duration, and more successfully treated generally. We allude here especially to that large and unfortunate class—"the pauper lunatics"—who are now being gradually brought within the pale of a higher humanity. Yet much remains to be done in "ways and means," before the desideratum of systematic and scientific management can be realized, and we can only endorse our sincere wish, that the Commissioners of Lunacy were invested with even more ample and plenary powers for this purpose than they at present possess.

It is shown in the present Report, that the number of the insane domiciled in asylums, hospitals, workhouses, and licensed houses, on the 1st January, 1857, amounted to 21,344 individuals of both sexes, viz., 10,084 males, and 11,260 females; 16,657 being pauper lunatics, and the remainder, 4687, private patients.

SUMMARY.

	Private.			Pauper.			Total Males.	Total Females.	Total Lunatics.
	M.	F.	Total.	M.	F.	Total.			
Asylums	119	94	213	6409	7687	14,096	6,528	7,781	14,309
Hospitals	812	744	1556	95	80	175	907	824	1,731
Metropolitan Licensed Houses	657	621	1278	471	828	1,299	1,128	1,449	2,577
Provincial Licensed Houses	787	724	1511	605	482	1,087	1,392	1,206	2,598
	2375	2183	4558	7580	9077	16,657	9,955	11,260	21,215
Royal Naval Hospital	129	...	129	...	...	...	129	...	129
	2504	2183	4687	7580	9077	16,657	10,084	11,260	21,344

	Found Lunatic by Inquisition.			Criminals.			Chargeable to Counties or Boroughs.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Asylums	5	1	6	197	63	260	534	586	1120
Hospitals	22	15	37	88	20	108	1	—	1
Metropolitan Licensed Houses	65	45	110	20	13	33	35	69	104
Provincial Licensed Houses	78	45	123	151	29	180	34	14	48
	170	106	276	456	125	581	604	669	1273

At the same date that 1 person in every 701 of the population of England and Wales was of unsound mind—a considerable increase in five years, as will be seen by comparison of the following years:—

In 1852 the ratio was 1 in 847
 In 1854 " 1 — 762
 In 1857 " 1 — 701

The last five years,—from 1852 to 1857,—exhibits an increase of 3,932 private and pauper lunatics, according to the Report of the Commissioners of Lunacy; and that of the Poor-law Board is still higher,—proving a decided increase of insanity beyond that of the increase of population. Of the entire number of lunatics, 3,227 only were deemed curable, and 17,984 incurable, or about 1 in every 6 persons—a very sad and melancholy calculate proportion.

For the maintenance and clothing of the pauper lunatic class alone, taking the rate stated in the Commissioners' Report, at 6s. 8d. each person weekly, requires an outlay of 266,270l. 6s. 8d. annually—truly a large draught on the public purse.

In praise of the ability, zeal, and searching investigations of the Commissioners, too much cannot be said; many, very many abuses have been exposed and rectified; but we repeat, much "*hard work*" remains before them in their arduous duties, before "establishments for the insane" have attained that *working* excellence of arrangement and management of which we believe them capable.

As regards establishments for the reception of pauper lunatics—the class to which we shall now principally confine our observations—the Commissioners do not hesitate in expressing their convictions, and give largely the preference to well-conducted middle-sized asylums, over workhouses, hospitals, or licensed houses; considering the last-named establishments as the worst and most objectionable. In this judgment we fully agree.

On the subject of asylums, the Commissioners report a decided advance made both in county and borough asylums during the past year; still, they have to speak with strong regret and disappointment of the continued avoidance, by large numbers of the boroughs and cities, of the provisions of the Legislature in this matter, and of duties imperfectly discharged by county authorities also.

The Commissioners complain of want of accommodation generally, even for present purposes being sadly deficient; how much more so must they soon become, taking into consideration the increasing ratio of population, and the increasing ratio of insanity to population.

The amount of space allotted to the thirty-three county and four borough asylums, which comprise all the public accommodation yet provided for the lunatic poor, suffices only for the reception of 15,600 patients at the present time, and contain at present 14,309; that many of these establishments have attained their full limit of size, available space remaining for little more than 1300 additional inmates; and during last year, taking the aggregate of ten of these asylums only, nearly 1000 patients were unable to find admission for want of necessary room. And if we couple this with another fact (Appendix to Report, E), it appears that while space has had to be found in licensed houses for nearly 2000 pauper lunatics, for whom there is no available accommodation in county asylums or hospitals, the number of additional lunatics and idiots detained in workhouses, or with friends, amounted, on the 1st January, 1857, to no less than 12,297. The obvious conclusion is, that what was found necessary at Colney Hatch and Hanwell must soon become a general requirement, and that no temporary expedients will satisfy a want so steadily increasing.

To meet these requirements, the Commissioners suggest the building of *additional*, differently constructed, more simple and economical edifices, rather than enlargement of existing asylums generally; and illustrate their position by reference to the already overgrown state of Hanwell and Colney Hatch, which institutions are still undergoing, or about to undergo, increased dimensions: and we entirely concur in the opinion of the Commissioners, that it would have been in every way preferable and wiser to have erected a third asylum of a more simple and less expensive kind. Moreover, beyond a certain size, asylums are objectionable; they forfeit the advantage—which nothing can replace, whether in general management or the treatment of disease—of individual and responsible supervision; few aids being so important in the cure or alleviation of insanity as those derivable from vigilant observation of individual peculiarities: but where the patients are so numerous that no medical officer can bring them within range of his personal examination and judgment, such opportunities are altogether lost; and amid the workings of a great machine, the physician and patient lose alike their individuality. Besides, the more extended the establishment, the more abridged become its means of cure; and this should be the first object of any and every asylum, there being a danger—as in the examples of Hanwell and Colney Hatch—instead of being hospitals for the treatment and relief of insanity, according to their original intention, of becoming

permanent places of refuge for too large a proportion of such cases, in which the chances of relief are few, to the exclusion of cases of more recent standing, which, by timely medical care therein, might never have contributed, as they now so largely do, to the permanent burdens on the ratepayers; besides limiting space, and thereby preventing sufficient proper and healthful opportunities of exercise and employment, indispensable to any due treatment of the insane.

To workhouses as receptacles for the insane, their disadvantages greatly outweigh any small benefit that may accrue from such establishments, in the opinion of the Commissioners. The result is, that detention in workhouses not only deteriorates the more harmless and imbecile cases, to which originally they are not unsuited, but has the tendency to render chronic and permanent such as might have yielded to early care; the one class, no longer associated with the other inmates, but congregated in separate wards, rapidly degenerate into a condition requiring all the attendance and treatment to be obtained only in a well-regulated asylum; and the others, presenting originally every chance of recovery, but finding none of its appliances and means, rapidly sink into that almost hopeless state which leaves them for life a burden on their parishes. Nor can a remedy be suggested as long as this workhouse system continues. The attendants are generally pauper inmates, totally unfitted for the charge; the wards gloomy, unprovided with means of occupation, exercise, or amusement; and the diet—above all essential to the unhappy objects of mental disease—rarely in any case exceeds that allowed to healthy and able-bodied inmates.

We might add many more and serious objections, did space permit, to workhouses as receptacles for the insane. We must dismiss very summarily the third division of our analysis—viz., that which relates to licensed houses as habitations for pauper lunatics; and we shall quote the opinions of the Commissioners of Lunacy, as expressed at pages 17 and 18 of their present Report:—

“That existing licensed houses in any adequate respect supply the want to which we have been directing attention—even where the means are large and ample—it is impossible to admit. The accommodation is necessarily of an inferior order; and it is never possible entirely to suppress a question as to the disinterestedness of those with whom the duty rests of receiving, treating, and detaining the inmates. So long as the patient is in a public asylum, no motive exists on the score of economy for depriving him of any comforts which his case requires; but in private institutions it is otherwise, where the same advantages do not exist, and where the difficulty of enforcing recommendations for his benefit can only be appreciated by those upon whom the duty of inspecting these establishments is imposed. The Commissioners in their Report, pages 18, 19, 20, give ample proof of these positions.”

The inferences to be drawn from the foregoing data may be summed up as follows:—

- 1st. That insanity is on the increase.
- 2nd. That the best means of cure or alleviation of mental disease, especially as bearing upon pauper lunacy, are, well-conducted, airy, and middle-sized asylums.
- 3rd. That all other *existing* establishments whatever, for the “poor lunatic,” are unfit, ill-arranged, and badly conducted.

NEW SCOTCH LUNACY LAW.

THE following is a faithful abstract of the Act for the regulation of the care and treatment of Lunatics, and for the provision, maintenance, and regulation of Lunatic Asylums in Scotland :—

The preamble recites that it is expedient that the existing Acts (55 Geo. III. c. 69; 9 Geo. IV., c. 34; and 4 and 5 Vict., c. 60) should be repealed, and that more efficient provision should be made for the care and treatment of lunatics, and for the provision, maintenance, and regulation of lunatic asylums in Scotland.

SEC. 1. Repeals the existing Acts from and after the 1st January, 1858.

SEC. 2. All officers appointed under the existing Acts are to continue to act until reappointed or superseded, and all licences are to remain in force for the periods for which they were granted, or until revoked. All proceedings under the existing Acts are to be valid, excepting such as are expressly made void or affected by this Act; and all fees, charges, liabilities, and expenses are to be payable as heretofore.

SEC. 3. Interprets the meaning of the technical words and expressions used in the Act.

SEC. 4. Constitutes a "General Board of Commissioners in Lunacy for Scotland," to be appointed by the Crown, and to consist of one unpaid Commissioner, who shall be Chairman, and two paid Commissioners, at salaries not exceeding 1200*l.* each per annum, to be fixed by the Treasury. The Crown may appoint other unpaid Commissioners, not exceeding three in all, for any specified time, and fill up vacancies.

SEC. 5. The Board is to have an office at Edinburgh, and is to meet on the 1st of November next, and is to hold two General Meetings annually in March and November, three members to form a quorum. The Board may adjourn, and may hold special meetings. At all meetings the chairman is to have both an original and a casting vote.

SEC. 6. The Board may appoint two or more of their number as a committee, who may exercise all the powers of the Board, and are to report to the Board.

SEC. 7. Every Commissioner, before acting, is to take an oath of office and secrecy in the form prescribed by the Act.

SEC. 8. The Commissioners are not to derive any profit or emolument from their office, except as provided by the Act, nor are they to be personally responsible for anything done *bonâ fide* under the Act, and the paid Commissioners are to devote their whole time to the duties of the office.

SEC. 9. The Board, in addition to special powers, are to have the superintendence, management, direction, and regulation of all matters arising under the Act in relation to lunatics, and to public, private, and district asylums, and to every house in which a lunatic is kept under the order of the sheriff, and also the power of granting or refusing licences for private asylums, and of renewing, transferring, recalling, or suspending them; and are to make rules and regulations for all private and district asylums, and the officers and servants thereof, as well as their own officers and servants, and to enforce the same by forfeiture of licence and by recovery of penalties; but such rules are to be submitted to Parliament. And as regards existing *public* asylums (unless when otherwise specially provided by the Act), the Board are only to regulate their inspection and visitation, and to make rules in relation to the books and minutes, and the returns of the entries to be made to the Board.

SEC. 10. All *public* asylums endowed, founded, or established after the passing of this Act, and all additions to existing public asylums, are to be

subject to the powers and provisions to which the Act subjects existing *public* asylums.

SEC. 11. The Board may investigate any case which they shall think it proper to inquire into, and, if it be necessary to obtain evidence, may, with the concurrence of the Lord Advocate or the Solicitor-General acting for him, summon any person to give evidence on oath, under a penalty not exceeding 30*l*. A form of summon is given in Schedule A.

SEC. 12 Provides for the payment of the reasonable expenses of witnesses.

SEC. 13 Provides for the appointment of a Secretary to the Board, at a salary not exceeding 500*l*. per annum, to be fixed by the Treasury, who shall give security: also for his removal, the appointment of a successor, the regulation of his duties by the Board, and security to be given by him.

SEC. 14. A return, to be prepared by the Secretary, is to be annually laid before Parliament, showing the number of orders for admission of lunatics into each asylum; the number of licences granted; the transfer of licences; the names of the superintendents; the number of patients, male and female, received into and discharged from each asylum, or removed or transferred from one asylum to another, classifying them as "cured," "relieved," and "unaffected by treatment," during the preceding year.

SEC. 15. The Secretary is to keep books and minutes of proceedings, accounts of moneys, and all charges and expenses under the Act; and an account is to be furnished annually to the Treasury, and audited, and the balance, if so directed, is to be paid into the Exchequer. An abstract of the accounts is to be laid before Parliament.

SEC. 16. The Board may appoint a clerk, at a salary not exceeding 150*l*. per annum, who shall give security, and perform such duties as the Board may require.

SEC. 17. The Board are to make general rules for the inspection and visitation of all asylums; and the two paid Commissioners are to visit, at least twice a year, every asylum and every house in which a lunatic is detained under order of a sheriff, and inquire into the condition of the lunatics—whether any coercion or restraint has been imposed—and are to record in the "Patients' Book" of the asylum, the state of health generally, mental and bodily, of the lunatics, what coercion or restraint has been imposed, and the cause thereof; and specially such particular cases as require remark; and also inquire into the management and condition of each asylum, as to its state of repair, heating, ventilation, cleanliness, supply of water, diet, and otherwise; and shall see that the patients do not exceed the proper number, and that the books and registers are properly kept. All persons connected with the management of the asylums, houses, and lunatics, are to disclose all particulars to the Commissioners, who are to record in a book all inspections, and communicate the same to the Board. The Commissioners may make any particular visitation or inquiry as they may think fit, by night or by day. A copy of all entries of the paid Commissioners, the sheriff, and justices of the peace, and of medical inspectors, in the Patients' Book, is to be transmitted to the Board by the superintendent of the asylum within eight days, under a penalty not exceeding 10*l*.

SEC. 18. The Commissioners are, once a year, or oftener, by day or night, to visit any prison in which there shall be, or be alleged or supposed to be, any lunatic, and make such inquiries as to the lunatics as they think proper or the Board may direct.

SEC. 19. The Commissioners are also, by day or night, to visit all poorhouses in which there may be any lunatic, and inquire whether the provisions of the law as to lunatics have been carried out in the parish, and also as to the dietary, accommodation, and treatment of the lunatics, and report in writing to the Board.

SEC. 20. The Board may, where necessary, take the assistance of such medical persons as may be required, and provide for the expense.

SEC. 21. If necessary, one of the Secretaries of State may appoint one or more medical persons (not exceeding two) to be Deputy Commissioners, at salaries not exceeding 500*l.* per annum each, who are to have the power of Commissioners; but no such appointment is to subsist after the expiration of five years from the passing of the Act.

SEC. 22. The Board is to exist five years only, from 1st January, 1858, after which time the two paid Commissioners are to become "Inspectors General in Lunacy for Scotland," subject to the orders of one of the Secretaries of State, and are to have the same power and duties as the Board—of visitation and inspection of all asylums, houses, prisons, poorhouses, and places in which any lunatic is kept—and are to perform such duties as the Secretary of State may prescribe. All notices required to be given to the Board are then to be given to the Inspectors General. Their salaries will then not exceed 1000*l.* per annum each.

SEC. 23. At the expiration of five years, the Secretary of State may empower the Inspectors General to exercise the powers of the Board in enforcing general regulations, providing accommodation for lunatics, and the citation and examination of witnesses, and generally any of the special powers of the Board; and from the same period, the power of granting licences is to be vested in the sheriff, but no licence is to be granted without a certificate from the Inspectors General, and no licence is to be continued if the Inspectors General report that it should be discontinued. The sheriff clerk is to receive and account for all fees and duties in respect of licences.

SEC. 24. Prescribes the oath of office and secrecy to be taken by every person appointed secretary, clerk, or medical or district inspector.

SEC. 25. The sheriff may at all times visit and inspect, either alone or with a medical person, every asylum or house within his jurisdiction in which a lunatic is kept under order of the sheriff, and inquire into its management, and the conduct of the officers and servants thereof, and is to insert in the Patients' Book any observations he may deem necessary.

SEC. 26. The justices of the peace of every county are to appoint, at quarter sessions, any three of their number to visit and inspect any asylum in such county, and insert in the Patients' Book their observations.

Licences for Private Asylums—Orders—and Certificates.

SEC. 27. All private asylums are to be licenced by the Board, and the licences are to be granted to the superintendent. All applications for licences, or for leave to transfer any licence, are to be made to the Board, accompanied by a statement of the name and qualification of the superintendent, and a plan of the house as the Board may direct; and the application must state the greatest number of lunatics of each sex proposed to be received, and any subsequent alteration in the house is to be shown on a plan when any application for the renewal of a licence is made.

SEC. 28. The licence to be granted by the Board must be according to the form in Schedule B, and bear a stamp of 10*s.*, and may be for such period, not exceeding thirteen months, as the Board shall think fit. For every licence there is to be paid to the Secretary 10*s.* for every patient not being a pauper, and 2*s.* 6*d.* for every pauper patient; but no licence is to be delivered until 15*l.* shall be paid. If the licence be for less than thirteen months, the Board may reduce the payment proportionately.

SEC. 29. The Board, on refusing to grant renewal of licence, may, without further payment, continue the existing licence for a period not exceeding three months, during which time the asylum and the officers are to be subject to all the regulations as if the existing licence had been renewed.

SEC. 30. If a person having a licence shall become incapable of keeping, or be desirous to discontinue keeping the asylum, or shall die, the Board may, on application, transfer the licence; and in case of the death of any one or more of several persons to whom a licence has been granted, the licence remains in force to the survivors, or survivor.

SEC. 31. A payment of 5s. is to be made for every order granted by the sheriff for admission of a patient, not being a pauper, and for every pauper 2s. 6d. These sums are to be received by the sheriff clerk, and remitted by him to the Secretary, on the direction of the Board, under a penalty not exceeding 10%.

SEC. 32. The money received for licences and orders of admission, and for searches, are to be applied in payment of salaries and expenses of the officers, and any surplus is to be divided among the district boards, in the proportion of the sums raised by each district board. The money is to be lodged in a bank, and payments are to be made on the order of the Board, and accounts of expenditure are to be audited and passed.

SEC. 33. If the money received for licences, &c., be insufficient to pay salaries and expenses, the deficiency is to be paid by the Treasury.

SEC. 34. The sheriff is not to grant an order for the reception of a lunatic into an asylum or house unless upon a petition in the form of Schedule C, accompanied by certificates (dated within fourteen days of the date of the petition), in the form of Schedule D, of two medical persons, one of whom may be the medical superintendent or consulting physician of a public or district asylum; and no person is to be received or detained in an asylum as a lunatic without an order of the sheriff, dated within fourteen days prior thereto, or twenty-one days if granted by the Sheriff of Orkney or Shetland. But a person may be detained for not more than twenty-four hours, whose case is certified by one medical person to be a case of emergency.

SEC. 35. The medical person, in his certificate, must specify the facts upon which the opinion is formed, and distinguish facts observed by himself from facts communicated to him by others; and no person is to be received into any asylum or house under a certificate founded only upon facts communicated by others.

SEC. 36. An incorrect or defective order or medical certificate may be amended by the person signing the same, within fourteen days after the reception of the lunatic, but such amendment will have no force unless sanctioned by the Board.

SEC. 37. The superintendent of the asylum or house, after two clear days, and within fourteen clear days from the day on which the patient is received, is to transmit to the Board copies of the order, medical certificates, petition and statement on which such patient has been received, and a notice of such admission, and a report signed by the medical attendant of the asylum, or by the medical attendant of the lunatic in any house, in the form in Schedule F, under a penalty not exceeding 20%.; and the sheriff clerk is, within seven days after the granting of any order, to send to the Board a notice, stating the person making the application, the person to whom the order applies, the medical person granting the certificates, the sheriff granting the order, and the asylum to which it was addressed, under a penalty not exceeding 10%.

SEC. 38. No person is to grant a certificate, or statement, without having seen and carefully examined the patient, under a penalty not exceeding 50%.; and if any person shall wilfully and falsely grant a certificate to the effect of any person being a lunatic, he will be liable to a penalty not exceeding 300%., or to imprisonment for any period not exceeding twelve months.

SEC. 39. Any person convicted of receiving, concealing, detaining, or harbouring any lunatic in a house requiring a licence, but unlicensed, and any person convicted of so sending any lunatic; or any person convicted of receiving,

concealing, detaining, or harbouring any lunatic in an asylum or house without an order, where such order is required, or notwithstanding an order for his liberation, or any person convicted of so sending any lunatic, shall be liable to a penalty not exceeding 100*l.*, or to be imprisoned for any space not exceeding twelve months.

SEC. 40. The Board may authorise search to be made as to whether any particular person has been confined as a lunatic within twelve months.

SEC. 41. A single patient cannot be received without the order of the sheriff and certificates, unless the house be the dwelling-place or private lodging of the lunatic. Any person receiving a single patient must, within seven days, transmit to the Board copies of the order, certificates, petition, and statement, and state the date of reception, situation of the house, and the name of the owner, occupier, and of the medical attendant, and send an annual medical certificate, and such patient is to be visited once a fortnight, or as the Board may direct, by a medical person, who shall enter in a book the date of each visit, and the condition of the lunatic's mental and bodily health; but this will not apply to a patient sent for a temporary residence not exceeding six months, under a medical certificate, in the form of Schedule G. Any one offending against these provisions will be liable to a penalty not exceeding 50*l.*, or imprisonment not exceeding three months.

SEC. 42. The Board may order the visitation and inspection of any house where a lunatic is detained by order of the sheriff, and in case of improper treatment may transfer the lunatic to another house or asylum, and the expense of maintenance will be chargeable on the lunatic's property, or on the party or parish legally bound for his support.

SEC. 43. Any person detaining a lunatic, although one of the family or a relative, in a private house, without an order by the sheriff, for more than a year, during any part of which coercion or restraint has been necessary, must intimate such detention to the Board, and transmit a medical certificate of the condition of the person so detained, and state the reasons rendering it desirable that such person should remain under private care. On suspicion of a person being so detained, the Board may apply to the sheriff, who may make inquiry; and if it shall appear that any person has been so detained, and it is expedient to remove the lunatic, the sheriff may issue a warrant for such removal. Any person infringing this provision will incur a penalty not exceeding 200*l.*, or imprisonment not exceeding three months.

SEC. 44. On the transfer of a licence from one house to another, the Board may authorize the transfer of the patients, without any fresh order from the sheriff or fresh medical certificates, provided due notice has been given to the persons on whose application the patients were confined. The superintendent is to give the Commissioner notice of such transfer of patients within eight days, under a penalty not exceeding 50*l.*

SEC. 45. Every asylum licensed for one hundred patients must have a resident medical attendant; and any asylum not having a resident medical attendant, if licensed for less than one hundred and more than fifty patients, must be visited daily by a medical attendant; and if licensed for fifty patients or less, must be visited at least twice a week by a medical attendant. The Board may decide that any asylum shall be visited at other times, but not oftener than once a day, and may require that any asylum licensed for more than fifty patients shall have a resident medical attendant.

SEC. 46. The Board may permit any asylum licensed for less than eleven patients to be visited at longer intervals, not exceeding once in every two weeks.

Access of Friends and others to Lunatics.

SEC. 47. The ministers of the parish in which the asylum is situated, or of the congregation to which the lunatic belongs, or any relative, or, in case of a

pauper, any member of the parochial board liable to maintain the lunatic, may visit any such lunatic, subject to regulations to be approved by the Board. But the superintendent and medical attendant may, when it is expedient, refuse permission to visit, or accompany the permission with conditions. Any complaint must be made to the Board, whose decision must be final. Every refusal is to be entered in the register of the asylum, and a copy sent to the Board within two days.

SEC. 48. The Board may give written orders of admission to visit patients, either with or without any restrictions, and any superintendent or keeper refusing admission will be liable to a penalty not exceeding 20*l*.

District Asylums.

SEC. 49. With a view to the erection of asylums for pauper lunatics, Scotland is to be divided into the districts described in Schedule H; but the districts may be varied by the Board, on the application of any prison board of the county interested.

SEC. 50. "District boards" are to be elected annually by the prison boards, the number of members and the times and places of meeting to be fixed by the general board. Vacancies are to be filled up at the next meeting of the prison board. The district boards may adjourn and may appoint committees of their number, to whom they may delegate all or any of their powers. Their meetings are to be conducted as meetings of a prison board.

SEC. 51. The Board is to ascertain the existing accommodation for pauper lunatics in each district, and, where it is insufficient, to require the district board to procure plans and estimates for providing the requisite accommodation, and to report to the Board.

SEC. 52. The Board, on approving the plan, may require the district board, within two years, to provide a suitable district asylum for pauper lunatics, for which purpose they may purchase the necessary land.

SEC. 53. District asylums, unless by their constitution otherwise vested, are to be vested in the district boards; and if they become insufficient, the Board may require the district board to increase the accommodation.

Assessments.

SEC. 54. The expense of providing district asylums, and the first year's expense of maintaining the establishment, and the expense of keeping them in repair, is to be ascertained, and raised by an assessment on the rental of the property in the district.

SEC. 55. The amount assessed for each district is to be remitted within eight months to the district board, who are to apply the same in defraying the expenses of providing the asylum, and also the first year's expenses of the officers, so long as the funds of the asylum are inadequate.

Special Arrangements.

SEC. 56. Any property or money held in trust for the establishment of an asylum for a county or parish may be contributed towards establishing a district asylum, and the assessment upon such county or parish will be relieved to the extent of the contribution.

SEC. 57. Any county or parish having an asylum available for paupers, and transferring the same to the district board, will be relieved to the extent of its value from assessment.

SEC. 58. If in any district there be an asylum wherein another district, or a parish in another district, has a right to accommodation, the Board of the district in which the asylum is situated may purchase such right to accommo-

dation, and the purchase-money is to go in reduction of the assessment on the district or parish to which such right belonged.

SEC. 59. Where there is an existing asylum in any district, having sufficient accommodation for the pauper lunatics of the district, the district board, instead of erecting an asylum, may agree with the proprietor for the reception and maintenance of the pauper lunatics, and the portion of the asylum set apart for the purpose is to remain under the management of the proprietor, subject to the inspection and regulations of the Board.

SEC. 60. The trustees of the Crichton Royal Institution for Lunatics, at Dumfries, are to receive in that asylum, or in the Southern Counties Asylum, the pauper lunatics of the counties Dumfries and Wigtown, and the stewardry of Kirkcudbright, upon the terms prescribed by the Act for pauper lunatics.

Borrowing Money.

SEC. 61. The district board may borrow money for the purposes of the Act at five per cent., on the security of the assessments, in the form in Schedule K, No. 1, a copy of which is to be transmitted to the Secretary, and registered. The security may be transferred by endorsement in the form in Schedule K, No. 2.

SEC. 62. The district board may borrow money from the Public Works Loan Commissioners.

SEC. 63. The district board is annually to pay all interest due on money borrowed, and to set apart not less than one-thirtieth part of the total sum borrowed until the whole be paid. The order in which the sums are to be paid off is to be determined when the same are advanced. Accounts are to be kept.

SEC. 64. Every district board borrowing money is to provide that the whole, principal and interest, shall be discharged within thirty years.

SEC. 65. Persons lending money on the security of the assessments are not bound to require proof that the provisions of the Act have been complied with, and the validity of the security is not to be questioned.

SEC. 66. The district board may pay off money already borrowed, with consent of the lender, and for that purpose borrow other money, but all principal and interest must be paid off within thirty years from the time of first borrowing the same.

SEC. 67. The district boards are annually, and whenever required by the Board, to transmit to them a detailed report and statement of all principal and interest falling due, for which the Board is to provide, in ascertaining the sum to be raised in each district.

SEC. 68. District asylums (except asylums mentioned in section 59) are, when completed, to be under the charge of the district boards, who are to appoint the necessary officers and servants, and fix their salaries, and see to the management and discipline of the asylum.

SEC. 69. On completion of the district asylum, the district board is to give notice in the *Edinburgh Gazette* on what day the asylum will be open for the reception of lunatics, which must be not less than a week subsequent to the notice.

SEC. 70. The district board is to appoint one or more medical inspectors, and fix the fees to be paid to them, with the approbation of the Board. The inspectors are to visit all asylums at the times required by the district board, Board, or sheriff, and to enter in the Patients' Book the condition of the asylum and of the lunatics, and the particulars of any case requiring remark. Where more than one inspector is appointed, it is not necessary that more than one should be a medical person.

SEC. 71. No unqualified medical person is to practise, or be employed, or to

grant a certificate under this Act; and no medical person having any pecuniary interest in any asylum, or whose father, brother, or son shall be superintendent of an asylum, is to practise, or be employed, or to grant a certificate under this Act, with reference to such asylum, under a penalty of 50*l.*, or imprisonment not exceeding three months. But the medical officer of a district asylum may grant certificates with reference to any lunatics of the district to which the asylum belongs.

SEC. 72. In case of refusal or neglect on the part of commissioners of supply, magistrates or others to carry the Act into execution, so far as it applies to them; or in case of any obstruction, the Board may apply by petition to the Court of Session.

SEC. 73. The payment to the district board for each pauper lunatic is to be such sum per week, by such periodical payments as the district board shall fix with the approbation of the Board, which is to be applied in payment of all expenses and salaries. If the payment be insufficient, the necessary additional charge is to be made for each pauper lunatic; or the Board may, where the burden on the parishes would be unreasonable, fix a maximum rate to be charged for each pauper lunatic, and the balance will be raised by assessment on the district.

SEC. 74. The district boards are to keep regular books, and accounts of receipts and expenditure, and minutes of proceedings. Three members are to form a quorum. An account of all assessments and other moneys levied, and of the application thereof, is to be transmitted to the Board half-yearly.

SEC. 75. Every pauper lunatic in a district asylum is to be chargeable to the parish of his legal settlement at the time the order for his reception was granted, and that parish will be deemed his residence.

SEC. 76. The parish of the settlement of a pauper lunatic is to pay all expenses of placing him in a district asylum and his maintenance there; and the sheriff of the county from which he was removed may fix the amount of the expenses, which will be recoverable by summary process.

SEC. 77. The expenses of removal and maintenance of any lunatic are to be defrayed out of his estate: or if he has no adequate estate, and such expenses be not borne by the lunatic's relatives, he is to be treated as a pauper lunatic, and his expenses are to be paid by the parish of his settlement.

SEC. 78. If the parish of the settlement of a pauper lunatic cannot be ascertained, and if the lunatic has no means of payment, nor any relations liable, the expenses are to be paid by the parish from which he was taken; but they will be recoverable at any time when it shall appear that they are legally chargeable to any other party or parish. The sheriff is to certify the amount, which will be recoverable by summary process. But the parish of settlement will only be liable, on receiving written notice, for the expenses incurred subsequent to the notice and for the year preceding.

SEC. 79. Parties interested in the expense of maintaining a pauper lunatic, and his relatives, on warrant of the sheriff, are to have free access to see him.

SEC. 80. Where a district asylum has more than sufficient accommodation for the pauper lunatics of the district, the district board may, with the sanction of the Board, receive other lunatics, whether paupers or not, and take an undertaking for the payment of all expenses of maintenance, and of his burial in case of his death, and for his removal on notice. Lunatics not being paupers are to have the same accommodation as pauper lunatics.

Property of Lunatics.

SEC. 81. Where the property of a lunatic is not under the management of a judicial factor, and it is supposed that such property or the income is not applied for his maintenance, the Board, or the Accountant of the Court of Session, is to

report to the Lord Advocate, who may apply to the Court of Session for an investigation and the appointment of a judicial factor, and the application of the property, or the income thereof, for the lunatic's maintenance; and after investigation the Court may appoint a judicial factor, and take any other measures for the benefit of the lunatic.

SEC. 82. Where the property of a lunatic, though under the management of a judicial factor, does not appear to be properly applied for his maintenance, the Board, or the Accountant of the Court of Session, is to report to the Lord Advocate, who may apply to the Court of Session for an investigation, and the Court may make such orders and take such proceedings as may be expedient.

SEC. 83. The expenses of any inquiries relating to a lunatic's property is to be chargeable against such property.

SEC. 84. The caution or security to be taken for any judicial factor of a lunatic is to require the approval of the Accountant of the Court of Session; and where any caution received before the passing of this Act is considered insufficient, the accountant is to inquire into it, and where necessary require additional caution, and if the same be not provided he is to bring the matter under the notice of the Court of Session.

Dangerous and Criminal Lunatics.

SEC. 85. In case of a lunatic apprehended and charged with assault, or other offence inferring danger, or a dangerous lunatic at large, the sheriff may, on an application accompanied by a medical certificate, commit the lunatic to safe custody, when notice is to be given by advertisement of an inquiry into his condition, and on being satisfied that he is a dangerous lunatic the sheriff is to commit him to an asylum, at the charge of the person or parish liable for his maintenance, where he will be detained until cured, or until caution or security shall be given for his safe custody.

SEC. 86. If application be made to the sheriff respecting a pauper lunatic having a settlement in another county, the sheriff may proceed, or at once send the application and the lunatic in safe custody, to the sheriff of such other county, who may proceed upon the application.

SEC. 87. Where a person indicted for a crime is found insane, the Court is to direct a finding to that effect to be recorded, and is to order the lunatic to be kept in strict custody until her Majesty's pleasure shall be known, and her Majesty may make an order for his safe custody.

SEC. 88. Where evidence is given that a person indicted for a crime or offence was insane at the time of committing such crime or offence, and he is acquitted, the jury will be required to find specially whether such person was insane at the time of committing such crime or offence, and whether such person was acquitted on account of insanity; and if so, the Court is to order such person to be kept in strict custody until her Majesty's pleasure be known, and her Majesty may give an order for his safe custody.

SEC. 89. If any person, while imprisoned under sentence of death or other sentence, or under any criminal charge or civil process, shall appear insane, the sheriff is to inquire, with the aid of two medical persons, into his insanity; and if they certify that he is insane, the Secretary of State may by warrant direct his removal to an asylum; and all persons removed from prison to an asylum by reason of insanity, are to remain in confinement in such asylum until two medical men certify to the Secretary of State that such person has become of sound mind; whereupon the Secretary of State may by warrant direct his removal to prison, or his discharge, if his period of imprisonment shall have expired.

SEC. 90. In remote parts of the country, where necessary dangerous or pauper lunatics may, under warrant of a justice of the peace of the county,

granted on sworn information, be sent for safe custody to the nearest town in which a sheriff or sheriff substitute shall reside, and the person having the custody of the lunatic must forthwith obtain the requisite medical certificates and order of the sheriff, when the case will be dealt with in the ordinary way.

SEC. 91. On the application of the Procurator Fiscal, or any of the Commissioners, accompanied by two medical certificates that the asylum is unsuitable for the confinement of the lunatic, the sheriff may order his removal to some other asylum or house; but notice of such application must be given to the person at whose instance the lunatic was confined, or if he be dead, or cannot be found, to his nearest known relative, and the expenses are to be defrayed by the party or parish liable for his maintenance.

SEC. 92. On production of the certificate of two medical persons, approved by the sheriff, of the recovery of the lunatic, or that he may be set at large, and the sheriff's order for his liberation, the superintendent of the asylum is to liberate him. The Board may also, on being satisfied by two medical certificates, order the liberation of such person. But previous to the liberation of any person, eight days' notice in writing must be given to the person at whose instance the lunatic was detained, or, in his absence, to the lunatic's nearest known relative, and in case of a pauper, to the party or parish maintaining him. The particulars and date of all cases of removal or liberation, and the authority for the same, must be entered in the register; and when a lunatic is discharged as incurable, such discharge must be entered, with the place to which, and the person under whose care he has been sent. Copies of all entries must be sent to the Board within two days.

SEC. 93. No such removal or liberation of a lunatic detained under the sentence of a court, shall take place without the authority of the court, or a warrant from the Secretary of State; and if by the expiration of the period of confinement awarded by the sentence, the lunatic would be entitled to discharge, but he is then uncured, he may be detained or removed to another asylum, upon two medical certificates and the order of the sheriff.

SEC. 94. On the release from an asylum of any person considering himself to have been unjustly confined, a copy of the order, petition, statement, and certificates upon which he was confined is at his request to be furnished to him by the clerk to the Board without fee.

SEC. 95. Every pauper lunatic is to be sent to the asylum for the district in which the parish of his settlement is situated, unless, under special circumstances, the parochial board, with consent of the Board, dispense with his removal, and provide for him in such other manner as the Board may sanction.

SEC. 96. A "register of lunatics" must be kept in every asylum, setting forth all particulars relating to every lunatic, in the form of Schedule I., and a copy transmitted to the Board, under a penalty not exceeding 20*l*.

SEC. 97. A register of deaths is to be kept in every asylum, setting forth the time and cause of death, and the duration of the disease, prepared and signed by the medical attendant in the form in Schedule J; and a certified copy is to be sent to the Board within three days, and also to the party or parish maintaining the lunatic, and to the person on whose application he was confined, under a penalty not exceeding 50*l*.

SEC. 98. A general register of all lunatics taken care of under this Act is to be prepared under the direction of the Board, who may at their discretion give or refuse information; and no inspection of the register is to take place without their written authority, under a penalty not exceeding 50*l*.

SEC. 99. Any officer of an asylum, or other person having charge of a lunatic, guilty of maltreating or neglecting such lunatic, will be liable to a penalty not exceeding 100*l*., or imprisonment not exceeding six months, without prejudice

to any action for damages. Where the maltreatment amounts to an assault, the public prosecutor may at his discretion prosecute for the assault or for the offence under this Act.

SEC. 100. The Lord Advocate may at all times examine and inspect all books, registers, minutes, proceedings, reports, returns, accounts, and documents in the possession of the Board, who are to afford him all information he may require.

SEC. 101. Any person wilfully making false statements, or refusing to give information required of him by this Act, will be liable to a penalty not exceeding 100*l.*, or imprisonment not exceeding twelve months.

SEC. 102. The Board is to report annually to the Secretary of State as to the condition and management of all asylums.

SEC. 103. Orkney and Shetland, with their respective dependencies, are to be taken as separate counties for the purposes of the Act.

SEC. 104. The Home Secretary may direct special visitation and examination of lunatics, and a report thereon; and persons having the care of such lunatics are to facilitate the execution of the order.

SEC. 105. The Home Secretary may employ the Board, or any person, to make special inquiry into the state of any asylum, and to report to him; and may authorize remuneration and payment of travelling and other expenses.

SEC. 106. Points out the mode in which penalties and forfeitures are to be recovered.

SEC. 107. Penalties recovered in respect of any public or private asylum are to be applied towards the general expenses of the Board; and penalties recovered in respect of any district asylum are to be applied in payment of the expenses of the district asylum. No proceedings for recovery of a penalty or forfeiture can be commenced more than six months after the commission or discovery of the offence.

SEC. 108. Proceedings for recovery of penalties or forfeitures are not to be set aside for want of form, nor to be subject to appeal.

SEC. 109. Powers granted to sheriffs by this Act are to be in addition to, and without prejudice to their powers by law.

SEC. 110. The prison board of any county may, within six months, by resolution duly communicated to the Board and advertised, constitute such county into a separate district.

SEC. 111. The Board, for five years from 1st January, 1858, and the Inspectors General afterwards, may enforce the provisions of this Act by summary application to the Court of Session or to the sheriff.

SEC. 112. Inspectors of the poor, within seven days after discovery of a pauper lunatic, are to notify to the chairman of the parochial board and to the Commissioners in Lunacy the name, residence, state and condition of such lunatic, and the steps he has taken for his care and custody, under a penalty of 10*l.*

SEC. 113. Repeals so much of the Poor-law Act (8 and 9 Vict. c. 83) as empowers the Board of Supervision in certain cases to provide for the removal of insane and fatuous poor persons to lunatic asylums.

SEC. 114. Enacts that the assessing clauses of the Act shall not extend to the county of Shetland.

SARDINIAN LAW OF LUNACY.

THE following bill for the care and treatment of the insane was introduced into the Sardinian Parliament in 1849, by Dr. Bertini, one of the deputies:—

CHAPTER I.—*Of Institutions for the Recovery and Relief of the Insane.*

ART. 1. All insane persons by whom the order and security of the public or of their family are compromised, and those whom it is necessary to treat away from their homes, shall be placed in establishments specially set apart for them.

ART. 2. These establishments are either public or private.

ART. 3. The public establishments shall be placed under the control of the public authorities, and their maintenance paid for out of the funds of the administrative divisions and of the communes.

ART. 4. Private establishments, whether conducted by a private individual or by a society, and expressly destined for the reception of one or more insane persons, shall be under the surveillance of the public authorities.

ART. 5. In order to legalize the establishment of a private asylum, the special authorization of the Minister of the Interior shall be obtained.

ART. 6. No insane person shall be detained, except provisionally, in any prison.

ART. 7. In communes where an hospital or hospice exists, an appropriate place shall be set apart in such charitable institutions for the care and relief of the insane, provided that accommodation cannot be obtained for them in a special institution.

In those communes which do not possess an hospital or hospice, a proper place shall be provided for the purpose.

CHAPTER II.—*Of the Authorities empowered to Permit or to Order the Admission of the Insane into Asylums.*

ART. 8. The general intendent of the administrative division shall be empowered to licence or to order the admission of the insane into the public or private establishments within the realm.

ART. 9. The Minister of the Interior, with the previous concurrence of the Foreign Minister, may permit the removal of insane persons to foreign asylums.

CHAPTER III.—*Of the Conditions requisite for the Admission of the Insane into Public or Private Establishments.*

ART. 10. For the admission of an insane person into a public or private asylum, when the demand has been made by the relatives or guardians, or by other person interested, the following documents are required:—

a. A certificate of the birth of the patient, or other document to show the name, surname, and age of the same.

b. An affidavit sworn to by two persons before the judge of requests of the district in which the patient resides, of the insane acts committed by him.

c. A declaration, sworn to by a physician or surgeon, of the mental state of the patient.

ART. 11. In the case of insane persons, proposed to be removed to foreign asylums, the consent of the family shall likewise be necessary.

ART. 12. The declaration set forth in Art. 10, sect. c, shall be void, if made by the physician of the establishment into which the patient is to be received.

This declaration, and also the attestation referred to in Art. 10, sect. b, shall

be of no effect after the lapse of fifteen days from the date at which they were made.

ART. 13. The demand for admission, accompanied by the documents prescribed in the preceding articles, shall be presented to the intendent of the province by the persons mentioned in Art. 10, or by the syndic of the commune in which the patient is found.

ART. 14. The patient shall not be admissible into the establishment after the lapse of more than ten days from the date of the order of admission and of the presentation. However, if the patient do not reside near the establishment, this time shall be extended in the proportion of one day for every thirty miles of distance between his abode and the asylum.

CHAPTER IV.—*Of the Rules regulating the Stay of the Insane in Public Establishments, and of the Conditions for their Release.*

ART. 15. It shall be the duty of the commission, as provided for hereafter by Art. 24, to transmit every fifteen days to the general intendent of the division, through the intendent of the province in which the asylum is situate, a report of the physical and mental condition of the patients, and also of the changes by admissions and discharges during the same period.

ART. 16. The aforesaid commission shall transmit every three months to the Minister of the Interior, an exact report on the physical and mental state of all the inmates of the asylum.

ART. 17. The discharge of patients from the asylum shall be authorized under the following circumstances:—

a. When restored to mental health.

b. When affected only with acute delirium.

c. When a demand is made by the patient's family, and the chief physician can certify that, although uncured, he is not dangerous, and readily manageable in his own family.

ART. 18. In all cases the discharge shall be always sanctioned by the intendent-general of the division, and shall moreover be officially intimated and registered.

ART. 19. The application for the discharge of an uncured patient shall be presented to the intendent-general of the division in which the asylum is situate, who, by the sanction and advice of the chief physician of the asylum, shall order the discharge.

ART. 20. Any patient who has been discharged from an asylum, under the provisions of the preceding articles, may be re-admitted within three months from the date of the discharge, on the production of a medical certificate to be submitted to the syndic, testifying to the continuation of the mental infirmity, and to the improbability of the patient continuing to reside with his family without danger to himself or others.

ART. 21. It shall be incumbent on all persons who shall place an insane person in a foreign asylum, to present every thirty days to the Minister of the Interior a precise report of the physical and mental condition of the patient, prepared by the physician of the asylum.

ART. 22. It shall be in the power of the Minister of the Interior, by previous concert with his colleague for foreign affairs, to cause any patient confined in a foreign asylum to return to his own country, provided that this can be done without injury to the patient, and that he can be readily provided for in his own family, and is in the possession of sufficient pecuniary means for his maintenance.

CHAPTER V.—*Of the Funds for the Support of Public Establishments.*

ART. 23. The costs for the maintenance of public asylums and for the removal of indigent patients shall be defrayed out of the revenues of the

administrative division and of the communes, according to an assessment ordered in the manner set forth in the statutes.

CHAPTER VI.—*Of the Government of Public and of the Surveillance of Private Asylums.*

ART. 24. The King, with the advice of the Minister of the Interior, shall nominate for each public asylum a commission, composed of four members, in addition to the physician-in-chief, who shall be a member *ex-officio*.

ART. 25. The Minister of the Interior, the intendants-general of divisions, the intendants of provinces, and the sanitary boards, shall exercise a surveillance over the private establishments existing in their respective districts.

ART. 26. A special regulation, approved by royal decree, shall determine on the manner of internal administration of public asylums, the staff of paid officers, their respective duties, religious, sanitary, and economical; and in the case of private asylums, all the conditions requisite for admission into them, and for their internal discipline.

M. Bonacossa proposed the following amendments:—

1. That public asylums should be wholly or partially supported by the State, and their expenses not thrown entirely upon the divisions and communes, as contemplated by Art. 3.

2. That, as patients are often kept in confinement in their own homes or in the houses of private persons to their detriment, it shall be made imperative on all persons retaining an insane person in their house to report the fact to the syndic of the commune, or to the intendant of the province.

3. That to the assigned conditions for discharge, another should be added—for those patients in whom no sign of insanity has manifested itself after a certain residence.

4. That a temporary power shall be given to the administrative commission (Art. 24) to represent the insane person in his affairs.

5. Lastly, that the cost of maintenance of indigent insane shall be paid out of the provincial treasury, and not be charged to the communes, except as portions of the province; and that the cost shall be regulated by the number of patients belonging to each division respectively.

PROPOSED SCHEME TO ESTABLISH A SOCIETY FOR THE PROTECTION AND CURE OF INVALIDS IN BELGIUM.

ONE of our most distinguished physicians, Doctor Parigot, has written to us on the subject of establishing a Society, the object of which would be to organize, on a large and original basis, the treatment of certain chronic diseases, which often resist individual care. We think it right to place M. Parigot's views before our readers, although we do not know whether they be capable of realization in our country: even admitting that this should not be the case, some suggestions of a practical nature may possibly arise from their perusal, and with this hope before us, we think they will be found worthy of attentive consideration.

The principle of association has become in our age the solution of every problem of general interest, and before which the efforts of individual action seem powerless. In spite of this recognised principle, no one has yet thought

of applying it towards the cure of those diseases which afflict humanity. Surely an undertaking, the aim of which would be to procure every means of cure and protection, ought to deserve our unanimous sympathy.

A powerful and extensive Society alone could unite these curative means under one single administration; the difficulty consists in creating these means, and causing them to operate towards the well-being of a large number of invalids. To attain this end, an institution which might justly claim the title of a *Society for the Protection of Invalids*, would, in the first place, unite at fixed epochs the most celebrated medical men of our country, to which réunions they might invite those of Germany, England, France, Holland, and other countries. The Society would thereby acquire the sympathy of the entire medical world, whose general direction and scientific programme it could follow, leaving to those immediately interested the right of selecting those methods which they considered most suitable. At all events, there would not be found in the establishments of the Society a patient incapable of being benefited by the *Contre-expertise* plan of treatment adopted by the learned concave, whose knowledge would have been derived from various schools.

It is desirable to notice that a locality amidst which a disease has been contracted, frequently offers, from its unhealthiness, serious impediments towards the recovery of a patient; and also that there is nothing which assists the medical treatment of a case more than a change of climate, country, and habits. But to obtain this assistance, it is necessary to be rich; consequently in an exceptional position. Who can travel in this age, without possessing a large fortune, so as to be ensured first-rate medical attendance?

The *Protecting Society* could alone effect, and at little cost, those therapeutical migrations from the towns to the country and the sea, where it would possess various establishments.

Should the objection be raised that such an enterprise is not of a nature to excite the attention of capitalists, we would answer that money has never been wanting in this country, even for doubtful speculations, when the aim was anything moral and noble, like that of the *Protective Society*.

We will not believe that the wealthy would be found wanting, should their concurrence be required. We will not believe that a Society, such as we desire to create, would fail in conciliating those two powerful agents of our century—mind and money; and in order to conciliate them, it would suffice, on the one hand, to realize prudently and wisely the curative suggestions of medical science, and on the other, to administer, with well-considered economy, our vast urban and rural estates, together with their industrial and agricultural productions.

Since 1830, Belgium has become a great European centre. Every year, at different periods, sections of scientific medical societies meet there from every part of the old and new worlds. Brussels, Ostend, and Spa also receive each year whole colonies of invalids, who come to seek amongst us either health or salutary distraction. By such persons, intelligent advice, and localities suited to their wants, their habits, and their requirements, could not fail in being appreciated.

Besides, the presence of learned foreigners would be of the greatest avail in forming congresses of medical consultations. These consultations could be held in the different establishments of the Society, and the practical fruit which must follow such réunions would serve as a line of conduct to the heads of the sanitary service. Each of them, and the patients especially, would not fail to understand the advantages of this combination. For the future, hopeless cases will be unknown, as every individual effort of mind as well as of experience would be combined for the removal of diseases which, hitherto, a restricted science has considered as incurable. Belgium would thus, again, become the

first to project a mission of progress in the midst of the great surrounding nations, and she will have made a great step towards the solution of the problems which are connected with the sufferings of our humanity.

All our northern medical men prescribe generally for their patients a voyage to Ostend, and there is no one in our age incapable of appreciating the advantages of sea-baths in the treatment of many constitutional diseases. It is also generally known that the influence of sea air and water is most beneficial in the strumous affections of infancy and youth. Unhappily, the season for baths is often too short, on the one hand, to produce a radical effect in the cure of these affections; on the other, the long-continued and necessary expense alarms many persons, who are thus deprived of a heroic, but too expensive mode of cure.

To obviate these difficulties, it would be indispensable for the Society to construct in the neighbourhood of Ostend a special establishment, which could ensure baths at all seasons. It is unnecessary for us to enter here on technical details: we will content ourselves simply with remarking, that men of science have considered the undertaking as practicable, and are convinced that its execution would not necessarily occasion an enormous outlay. Large and elegant apartments, whose view would be only bounded by the horizon of the sea; others less extensive, but equally comfortable; halls for gymnastic exercises; saloons for assemblies; music; lectures, scientific as well as literary; also covered basins, in which salt water, sufficiently heated, could be adapted to the use of invalids and delicate persons, as also private bathing-rooms; finally, nothing need be omitted that can contribute to the cure or relief of the patients, either by medical treatment directed to their bodies, or by those pleasurable abstractions which exert their influence through the medium of the mind: a system, in short, which would render this establishment one of the most interesting institutions of Belgium. But there are seasons in the year when the sea and its vicinity assume in our country a cold and melancholy aspect—added to which, a too lengthened residence near it would end in producing a contrary effect to the one intended. Amongst the conditions essential to the cure of chronic diseases, will be found that of living, either in town or country, *under a warm atmosphere*. But where can we find in Belgium a mild and unvarying climate throughout the winter season? This question has been amply discussed, and partly decided by an article in the *Journal de Médecine de Bruxelles*; and it is stated that the portion of our country called Belgic Lorraine, but which the French designate Provence Belge, and which is situated at the foot and between the acclivities of the Ardennes, offers many localities where the temperature is higher and milder than that of any other part of Belgium. The cause of this difference is easily understood: these localities are, as it were, concealed by a curtain of mountains; they are protected against the north and east winds as entirely as is found to be the case with the *Doues* on the southern coast of the Isle of Wight, which affords to the traveller an artificial climate, very similar to that bordering on the Mediterranean. In the charming valleys hid in the depths of the Ardennes, covered gardens would complete the metamorphosis of the climate, and render the residences in these localities very advantageous in treating affections of the lungs, diseases which a well-understood treatment can either allay or cure. Every year we see numbers of affluent persons betake themselves to distant, but warm, climates; often they quit their families and their occupations with regret: to them, the Society would offer *at small cost, and only some hours' travelling*, all that they are driven to seek many hundreds of miles hence.

The *Protecting Society*, in order to accomplish its end, would be necessitated to purchase large and old domains in the provinces of Namur and Liège, which are arranged in some sort so as to accommodate persons accustomed to *la vie de château*. If the importance of external circumstances were sufficiently esti-

mated as to their effects on the minds and spirits of certain invalids, it would be easily understood why the residences should be commodious and decorated with elegance—why arts and sciences should be cultivated—and why, above all, the usages of the highest society should always be observed. The *Protecting Society* would offer the same advantages to less exacting patients, for whom *villas* and even *cottages* could be adapted.

In this manner, the repose or amusements of the country, or even the occupations of a rustic life, might modify, according to the necessities of each individual, those diseases which had resisted other modes of treatment. In the case of each patient, and whatever might be his mental or physical condition, he would enjoy the benefit of home life, or that of retirement in the midst of the pure country air.

With such grounds for stability, the Society could not fail of becoming the complement of many “*établissements de santé*” in Germany and England: indeed, nothing would be better calculated to charm convalescents, and to render the change of country, habits, and language, mainly conducive towards their recovery.

The Society would retain the power of erecting, in a healthy locality near Brussels, a large institution for the education of children whose minds, whether from disease or other causes, were imperfectly developed. Medical men and special instructors would be placed at the head of this institution, of which Belgium and other countries are yet deficient. Brussels ought to be the centre of this Society. One of the large establishments near the city might be used as the starting-point for our operations. We are convinced that success would triumphantly demonstrate the practicability of a Society which could combine so many material and moral advantages.

The formation of this Society would be the realization of a new idea—that of curing *en grand*, by means which it would be impracticable to employ individually. At all events, the projector can conscientiously apply to himself those two immortal lines of Camoens, in which he changes only one single word:—

“Vereis amor da sciencia, não movido
De premio vil; mas alto, e quasi eterno!”

(From the *Journal de l'Indépendance Belge*.)

INSPECTORS OF LUNACY FOR SCOTLAND.

DR. BROWNE, of the Crichton Institution, Dumfries, has been selected by the Government as one of the Inspectors of Lunacy under the new Bill. This appointment reflects great credit upon the Government: Dr. Browne may assuredly be pronounced to be the “right man in the right place.” Dr. Cox is his colleague.

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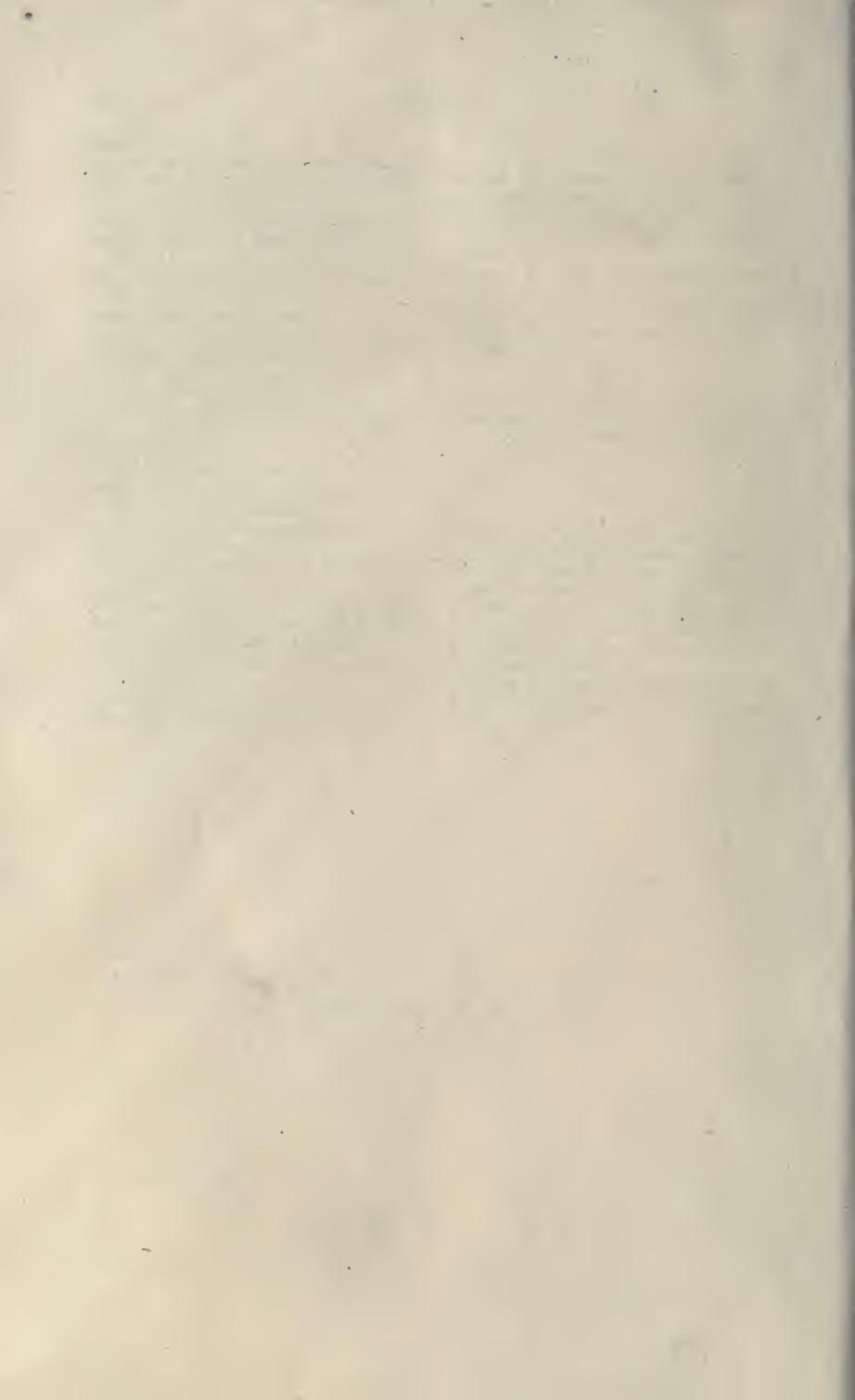
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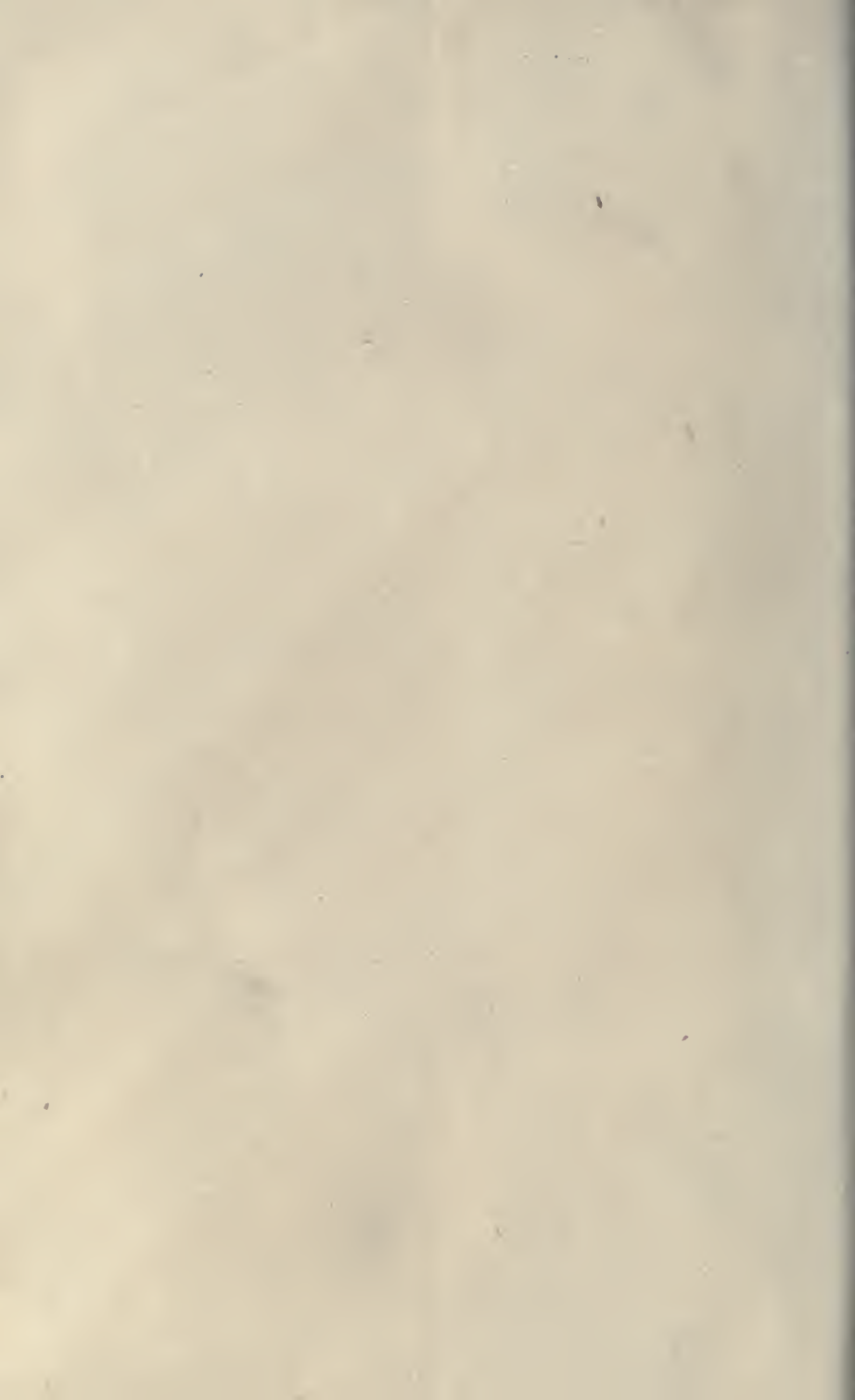
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